# Integrated Logistics Support Plan (ILSP)

# For the

# Litton Denro

# Rapid Deployment Voice Switch (RDVS) IIA

**CIP NO. C.05.002 (32.12)**

**ILSP No. 97-AFR-302-001**

**Revision: 002**
**December 15, 1999**

**APPROVAL PAGE**

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This revision of the Integrated Logistics Support Plan (ILSP) for the Rapid Deployment Voice Switch (RDVS) IIA has been updated to all changes to reflect the current program status.

This ILSP presents the procedures necessary to accomplish the National Airspace Integrated Logistics Support (NAILS) requirements for the RDVS IIA.

The Associate Product Lead for Logistics (APLL) is the point of contact for all NAILS related matters of this project.

Approval of this document constitutes the baseline for the ILSP. Any additional changes will require coordination with the NAILSMT members.

Recommend Approval: //ss12/15/99//
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RDVS IIA ILSP
Dated 12/15/99
Revision 002
Change 1, 7/10/2000

RDVS IIA Integrated Logistics Support Plan (ILSP), Revision 002, dated 12/15/1999 has been amended.

Technical information in the RDVS IIA ILSP, Chapter 4, paragraph 4.1.2, Spare Support Strategy, has been revised since publication was distributed. Change pages are marked ″Change 1, 7/10/2000″.

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# CHAPTER 1. INTRODUCTION

The Integrated Logistics Support Plan (ILSP) for the Litton Denro Rapid Deployment Voice Switch (RDVS) IIA provides guidance for integrated logistics support planning and execution. The ILSP is an interactive document and will be updated as support requirement changes.

The ILSP was prepared in accordance with Federal Aviation Administration (FAA) policies and standards. A list of applicable policies, standards, and orders is presented in Appendix A.

## 1.1 SCOPE

This document describes the logistics support strategy for the Litton Denro RDVS IIA system, as identified in contract No. DTFA01-97-C-00010, dated December 20,1996. Included are user responsibilities, a management matrix, maintenance requirements, and a description of the National Airspace Integrated Logistics Support (NAILS) requirements.

Operation Support Telephone System (OSTS)
Details concerning the support for the OSTS are attached to this ILSP at Appendix E.

Voice Switch By Pass (VSBP)
Details concerning the support for the VSBP are attached to this ILSP at Appendix F.

## 1.2 SYSTEM DESCRIPTION

The RDVS IIA is based on the capabilities of the ICSS Model 3080-E Large Baseline System core requirements with a digital voice communication switching system that provides non-blocking voice communication between air traffic control operators' positions, radio channels, and telephone landlines. The RDVS IIA uses a distributed and redundant microprocessor architecture with redundant control and voice buses to prevent single point failures that affect more than one operator position. The RDVS IIA will provide air-to-ground (A/G) radio and ground-to-ground (G/G) intercom and interphone audio and control functions for airport traffic control towers (ATCTs) and terminal radar approach control (TRACON) facilities RDVS IIA System consists of two basic configurations; Kansas City Type and Enhanced Type. These two configurations are referred to as RDVS IIA systems.

The Kansas City Type system conform to the architecture of a basic Large Baseline RDVS unit (Model 3080-E) and augmented with Backroom Equipment Expansion Items, Additional Computer Equipment, Position Equipment Items, Position Instruments, and Spares. The software for the Kansas City type is based on the current Control Configuration Terminal (CCT) and the Quality Control Terminal (QCT). The Kansas City Type also includes the IA/DA Position panel, DA Expansion panel and the Radio Position panel. These panels were developed under the Litton Denro for use in the Integrated Communications Switching System (ICSS) Model 3080-E system through value engineering efforts. The Kansas City Type does not include the value engineering enhancements associated with the Enhanced system.

The Enhanced Type system contains the enhancements currently being developed and tested under RDVS contract DTFA01-95-C-00004. The Enhanced system is a basic RDVS unit with backroom equipment expansion items, additional computer equipment, position equipment items, position instruments, Touch Entry

Display (TED), spares (enhanced type) and special test equipment. The software for the Enhanced baseline is new CCT and QCT versions.

The Southern California TRACON (SCT) an Enhanced Type system configuration is modified to the unique requirements due to the size and complexity. The system will provide integrated non-blocking communications of both air/ground and ground/ground, with the capacity to expand to 160 positions.

The RDVS IIA contract was awarded to Litton Denro. The 7-year contract consist of a base period (3 years), two each two-year options. RDVS IIA systems can be procured during the base and the two each two-year option periods; support service can be procured for the same periods.

## 1.3 SYSTEM OPERATION CONCEPT

The RDVS IIA system provides voice communications to Airport Traffic Control Towers (ATCT) and Terminal Radar Approach Control (TRACON) facilities. The RDVS IIA integrates all of the principle services used by air traffic controllers as they communicate with pilots and one another.

The RDVS IIA equipment will interface with the following equipment:

1. Existing Radio Equipment, Voice Frequency Signaling System (VFSS), Grim Tone Control Equipment, and Radio Control Equipment (RCE), Intellect and Downscoped Radio Control Equipment;

2. Private Automatic Branch Exchange (PABX) and Central Office (CO) Equipment, Federal Telephone System (FTS) and Wide Area Telephone System (WATS);

3. Recording Equipment;

4. Administrative Telephone System (ATS). The current ATS system is manufactured by TELRAD. Some TELRADs (site dependent) may be removed with the old switch equipment and replaced by a new Operational Support Telephone System (OSTS).

## 1.4 STUDIES AND ANALYSES

Market surveys and system analyses were conducted in accordance with FAA standards and requirements prior to the issuing the contract. At this point, no additional studies or analyses are planned.

## 1.5 ELEMENTS OF LOGISTICS SUPPORT

NAILS is an interrelated and unified approach to the managerial and technical activities that support the National Airspace System (NAS). The analyses associated with NAILS influence the system design to optimize system reliability and life-cycle cost. Through this program, support requirements are identified and acquired.

To focus management attention on key logistics support issues, FAA Order 1800.58A, "National Airspace Integrated Logistics Support (NAILS) Policy", identifies eight logistics support elements that are required to complete the integrated logistics support task. They are:

1. Maintenance Planning
2. Supply Support
3. Support Equipment
4. Training, Training Support and Personnel Skills
5. Direct-Work Maintenance Staffing
6. Maintenance Support Facilities
7. Packaging, Handling, Storage, and Transportation
8. Technical Data

The logistics support requirements generated in response to each of these elements are based upon existing maintenance and training support available for the Litton Type II fielded system. These logistics support elements are discussed in subsequent sections of this ILSP.

## 1.6 PROGRAM MILESTONES SCHEDULE

Table 1.6-1, lists the initial schedule for acquisition and support requirements for the RDVS IIA system.

TABLE 1.6-1, RDVS IIA MILESTONES

| Milestone | RDVS IIA |
|---|---|
| 1. Issue RFP | November 1996 |
| 2. Complete Technical Evaluation | December 1996 |
| 3. Award Contract | December 1996 |
| 4. Logistics/Technical Interchange Meetings (TIM) | As Required |
| 5. System Review | January 1997 |
| 6. Factory Acceptance Test (Academy) | July 25,1997 |
| 7. Site Acceptance Test (Rochester) | November 7,1997 |
| 8. First Operational Readiness Date | November 7,1997 |
| 9. Last System Delivery Date | To Be Determined |

## CHAPTER 2. LOGISTICS MANAGEMENT

This chapter describes the objectives, organizational structure and responsibilities of the Government and contractor for planning and implementing logistics support for the RDVS IIA.

### 2.1 NAILS PROGRAM OBJECTIVES

The objectives of the NAILS program are to:

- Identify and quantify the resources needed to support the RDVS IIA system.
- Validate system supportability.
- Coordinate the timely fielding of the planned support system.

The remainder of this document will detail how these goals will be accomplished.

### 2.2 NAILSMT STRUCTURE AND RESPONSIBILITIES

The following presents the Government organizational structure by office symbol and a summary of responsibilities in support of the RDVS IIA project. Government organization and offices that will support this program are listed in Table 2.1-1.

ARN-200 - The Communications and Navigation Division manages the life-cycle support program for NAS communications systems. Coordinate the disposal of displaced systems and equipment for Airway Facilities (AF), supports the integrated logistics support (ILS) process, oversees the configuration management processes, and monitors depot level spares and repair parts. Appoints an Associate Product Lead (APL) for Logistics and a support team too direct and manage the logistics requirements of the RDVS IIA project.

ARN-200/APLL For Logistics - The APL for Logistics reviews all ILS requirements for the RDVS IIA project and assists the IPT Lead and coordinates with NAILSMT personnel to ensure the timely acquisition, development, and accomplishment of logistics and training requirements.

ARN-200/Requirements - The Technical Requirements Specialist identifies maintenance requirements, develops disposal plans for existing and planned communications projects and advises the IPT Lead and APL for Logistics on AF requirements.

ARN-200/NISC - The logistics and training analysts from the National Airspace System (NAS) Implementation Support Contractor (NISC) contractors support the APL for Logistics and assist in the development, coordination, and implementation of logistics support, and assists in the identification of training requirements and development of training plans and schedules.

TABLE 2.1-1 GOVERNMENT ORGANIZATION

| Position | Office |
|---|---|
| Chairperson, APL for Logistics<br>Co-chairperson, IPT Lead | Communications and Navigation Division, ARN-200<br>Integrated Product Team for Voice Switching and Recording Product Line, AND-320 |
| Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Support | Contracting Officer's Technical Representative/Product Lead (COTR/PL), AND-320<br>Airway Facilities/Air Traffic Requirements, ARN-200<br>Work Force Planning and Development, AFZ-200<br>Airway Facilities Training Division, AFZ-100<br>Air Traffic Requirements, ARN-200<br>Air Traffic Training Division, ATX-100<br>Communications Engineering Support Branch, AOS-510<br>Hardware Contract Maintenance Team, AOS-7<br>Communications Product Division, AML-6000<br>Communications Division, AMA-410<br>Terminal Instructional Design Section, AMA-551<br>Quality Assurance Division, ASU-220<br>APL for NAS Implementation, ANS-700<br>Regional Representatives, AXX-400/500<br>Contracting Officer, ASU-330<br>Professional Airway System Specialist (PASS)<br>ILS Contractor Support, ARN-200/NISC |

AND-320/IPT Lead - The Integrated Product Team (IPT) Lead for Voice Switching and Recording Product Line, provides management direction for the RDVS IIA product. The IPT Lead oversees the acquisition, design, development, testing, and commissioning of the RDVS IIA. The IPT Lead is also responsible for the budget, contract, and all activities required to acquire and support the RDVS IIA through deployment.

AND-320/COTR - The RDVS IIA contracting officers technical representative/product lead (COTR/PL) ensures all engineering, testing, logistics, and training requirements are identified in and accomplished in accordance with the RDVS IIA contracts. The COTR/PL advises the IPT Lead on all RDVS IIA contract requirements.

AFZ-200 - The Work Force Planning and Development Division provides an analysis of direct works staffing requirements and issues.

AFZ-100 - The Airway Facilities (AF) Training Division ensures maintenance life-cycle training requirements for the RDVS IIA are satisfied.

ANS-700 - The APL for NAS Implementation (APLNI) provides management direction and guidance for the implementation of the RDVS IIA project. The APLNI manages the development of the RDVS IIA Implementation Plan (PIP), the Generic Site Implementation Plan (GSIP), and as required, assists the regions in the development of a Site Implementation Plan (SIP). The APLNI also conducts field implementation team

(FIT) meetings to provide information and foster early identification of problems or issues that impact implementation.

ATX-100 - The Air Traffic (AT) Training Division ensures that operation and system administration life-cycle training requirements for the RDVS IIA products are satisfied.

AOS-510 - The Communications Engineering Support Branch, provides direct engineering support for field facilities. This includes: hardware and software maintenance support; updating and distributing directives and technical documentation; and developing, evaluating, and implementing in-service improvements and modifications for NAS systems as assigned by FAA Order 1320.48, Engineering Field Support Sector Maintenance Program Procedures.

AMA-1 (FAA Academy) - AMA-410/551 assist in the development, conduct, and administration of national technical (AF/AT) training as established by AFZ-100 and ATX-100 for FAA employees and other government and non-government personnel. Technical and educational support is provided by AMA-410/551 through evaluations of contractor-developed training to ensure that a quality training program is implemented.

AML-6000 - The Manager, Communications Product Division, is the FAA Logistics Center (FAALC) Lead representative on the NAILSMT. AML-6000 Coordinate's depot-level maintenance planning, supply support, staffing, support and test equipment, maintenance support facilities, and training requirements needed to support the RDVS IIA.

ASU-220 - The Quality Assurance Division monitors the Litton Denro quality assurance program and all deliverables, including the hardware, software, technical documentation, and test equipment/adapters for compliance with the RDVS IIA contracts.

AXX-400/500 - AF/AT individuals from the regions provide points of contact for the identification and implementation of logistics and training requirements, and life cycle support of the PASS union representative monitors the logistics development for the RDVS IIA and ensures that union support requirements are being addressed.

ASU-330 - The Contracting Officer is responsible for all contract administration activities (i.e., awards contracts, accepts or rejects offers, exercises options, conducts negotiations, prepares contract modifications, letters to contractors, and approves invoices) in conjunction with all IPT members.

## 2.3 LITTON DENRO, INC. ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES

The prime contractor for the RDVS IIA is Litton Denro Incorporated, Gaithersburg, Maryland and is responsible for the development, implementation and management of an in-house ILS program.

The prime contractor is required to establish liaison with the FAA Product Team and maintain close relationship with the APL for Logistics in matters dealing with logistics. The principal conduit for this liaison is through the NAILSMT membership, which has been established by the Product Team.

## CHAPTER 3. MAINTENANCE PLANNING

This chapter describes the maintenance concept for the RDVS IIA.

### 3.1 MAINTENANCE CONCEPT

The maintenance concept for the RDVS IIA project is in accordance with FAA Order 6000.30B, Policy for Maintenance of the NAS Through the Year 2000, which details a two-level maintenance philosophy; field and depot. This concept assumes the use of modular designed equipment, which enables field level personnel to correct equipment failure's on-site by replacing the faulty line replaceable unit (LRU). Field level maintenance consists of all maintenance activities performed on equipment installed in its operating environment and includes both preventive and corrective maintenance actions and installing authorized electronic equipment modifications (EEMs). Depot-level maintenance consists of contracting repair of failed LRUs that are shipped from the site or work center or ordering replacement LRUs. The RDVS IIA will utilize this maintenance concept throughout its operational life cycle.

The service life of the RDVS IIA system is predicted to be at 10-15 years, although technology insertions throughout the life of the system could increase this expected service life if necessary. The maintenance and logistics support will be consistent with this life cycle.

For details on system certification, FAA Order 6000.15B, "General Maintenance Handbook for Airway Facilities", establishes the Airway Facilities (AF) maintenance program. General administrative and management standards, procedures, and guidelines are provided for the management, operation and maintenance of the National Airspace System (NAS).

### 3.2 MAINTENANCE RESPONSIBILITIES

#### 3.2.1 Field Maintenance.

The Government will be responsible for field maintenance beginning at site acceptance.

The RDVS IIA TED display screen will requires periodic cleaning. The care and cleaning of the TEDs will require the use of a general-purpose glass cleaner with a soft cloth/towel. The front of the display is acrylic over the polarizer and compensation film. The acrylic is not a problem, but the polarizer and compensation films do not like water based anything.

#### 3.2.2 Depot Maintenance.

Contractor will provide depot-level repair support for all RDVS IIA System hardware, firmware, and software for the life of the contract at the contractor's facilities.

#### 3.2.3 Second Level Engineering Support.

Second Level engineering support and technical assistance will be managed and provided by AOS-510. Sites should call AOS-510 at the following numbers for technical assistance:

a. (405) 954-0066 (0800-1630 Central Standard Time (CST)), Normal duty hours.
b. (405) 954-3583, After normal duty hours.

If assistance is required from the contractor, Litton Denro, AOS-510 will arrange for this support.

### 3.3 WARRANTY PROGRAM

A warranty was not procured with this equipment.

## CHAPTER 4. SUPPLY SUPPORT

This chapter describes the methods used for supplying spare parts, line replaceable Unit (LRU) and assemblies for maintenance of RDVS IIA equipment, and includes the planned method for obtaining and storing spare parts, both common and parts-peculiar, needed to support the maintenance activities.

### 4.1 PROVISIONING STRATEGIES

#### 4.1.1 Provisioning

There were no provisioning requirements for the Litton Denro RDVS IIA since the contractor will provide supply support. A recommended depot spares list of spares will be provided by the contractor and approved by the government. The program office with F&E procured the recommended spares.

#### 4.1.2 Spare Support Strategy

Spares to support the maintenance requirements of the system are maintained at the sites and the contractor.

Site - Spare LRUs were purchased with the equipment and are maintained as site spares. The processing of spares at the sites is as follows. A failed LRU will be removed from the system and replaced using an operable LRU from the site spares inventory. Some Circuit Cards have strapping and jumper options as well as firmware that must be configured or installed to match the one being replaced. In some cases, this requires removing an FPGA or EPROM from the failed unit or from spares and installing it on the spare prior to installing it in the system. Site technicians will notify the contractor that a LRU has failed by calling the Litton Denro Hotline number (800-847-7790) or local number (301) 869-1628. During the call the technician shall inform the contractor whether the replacement spare should be an “Emergency” or “Routine Repair”. The contractor will issue a Return Authorization Number (RMA) number for the return shipment. Site technician will ship the package via Fed Ex using the pre-address Fed Ex form with the applicable account number for returning failed items for repair. Site technician must complete and return the Field Failure and Trouble Report for the failed item. A failure should be deemed emergency if the following conditions exist**:**

> The failed LRU is not operationally redundant (i.e., TED, speaker, jackbox, etc.) and the site spares inventory is one or less.

A failure should be deemed routine if the following conditions exist:

> The failed LRU is operationally redundant (i.e., DVA, processor, radio interface, etc.) and the site spares inventory is one or more.

Item(s) ordered "Emergency" will be replaced from Depot Spares and the replacement will be shipped to the site within 24 hours. The site technician must return the failed LRU back to the contractor's facility within 7 days after receiving a replacement. The site technician will package, ship **at contractor's expense** the failed LRU using contractor packing material provided with the replacement spare and placing the contractor's pre-addressed Fed Ex shipping form with the RMA clearly marked on the package. When the operable spare is received from the contractor, it will be placed in the site spares inventory.

If deemed a routine repair the site technician will ship the failed LRU back to the contractor's facility within 7 days. The site technician will package, ship **at contractor's expense** the failed LRU using contractor packing material provided with the site spare and place the contractor's pre-addressed Fed Ex shipping form with the RMA clearly marked on the package. The contractor will within 30 days calendar days after receipt of the failed part either repair or replace the failed LRU. When the operable spare is received from the contractor, it will be placed in the site spares inventory.

Contractor – Litton Denro maintains the depot spare parts for RDVS IIA. Upon receipt of notification by a site that an LRU has failed and depending on the priority the contractor will ship in accordance with subparagraph below.

a. Emergency replacement which shall require shipment of serviceable components so that they are received at the FAA site where required, within 24 hours, including weekends and holidays, after receipt of a telephonic request from the site.

b. Routine repair, which shall require the repair of faulty LRUs to be completed within thirty (30) calendar days after receipt of the failed LRUs by Litton Denro. LRUs will be repaired to restore them to a serviceable operating condition meeting the performance requirements established at delivery.

Litton Denro is responsible for providing, repairing or replacing the failed LRUs, and the transportation costs associated with shipping the LRUs to and from Litton Denro. Litton Denro will issue a RMA number after receipt of notification by the site. Litton Denro will also supply pre-addressed Fed Ex forms with the applicable account number for returning failed items for repair, and copies of the Litton Denro Field Failure and Trouble Report Forms with procedure for completing form. These forms are to be used only for returning items to Litton and with the RMA number clearly marked on the package. See Appendix I, Litton Denro "Field Failure and Trouble Report Forms and Procedure".

**Questions concerning shipping procedure can be referred to the APML at (202) 493-4789.**

4.1.3 Exchange and Repair (E&R) of Faulty LRUs.

The contractor is responsible for providing E&R service. The FAA will return all failed LRUs to the contractor's repair facility. The site timely return of the failed LRU is required to support the repair pipeline and avoid potentially compromising support for other RDVS IIA sites.

## 4.2 MONTHLY CUMULATIVE REPAIR AND ANALYSIS REPORT

Litton Denro will provide the Government with a monthly cumulative repair summary analysis report. The report will provide data on all LRUs submitted by the Government for depot level repair action under the contractor repair service provisions of the RDVS IIA contract.

The cumulative repair and analysis report will commence with the First Article system and will include documenting repairs actions accomplished for all systems.

## 4.3 PERIPHERAL EQUIPMENT

New peripheral equipment (i.e., headsets, handsets and footswitches) will not be routinely issued with each RDVS IIA system. Each site is required to identify in the RDVS IIA site survey worksheet whether or not the peripheral equipment currently being used at the site will be compatible with the RDVS IIA, the number of each item on hand, and the quantity of each that will be needed when the RDVS IIA is delivered.

ARN-200 will validate any peripheral equipment requirements a site identified. If the site has compatible peripherals, AND-320 will provide only the difference between what the site currently has on hand and any increase because of an increase in the controller work force. No action needed to be initiated by the site.

### 4.4.1 Maintenance Repair Support for Headsets/Peripherals on Voice Switching Systems

Headsets/peripherals except footswitches are procured by the Product Team from the FAALC and delivered prior to the RDVS IIA system arriving on site. Footswitches are procured by AND-320 from the RDVS IIA contract and delivered with system.

Replacement of unserviceable headsets and handsets for the RDVS IIA Litton Denro system will be through the FAA Logistics Center. A memorandum to this effect, dated June 29, 1998 has been distributed to all concerned personnel and is included as Appendix G.

Replacement of unserviceable footswitches will be through Litton Denro and is the same as returning a faulty LRU.

Questions concerning requisition issues can be referred to the APML at (202) 493-4789.

## CHAPTER 5. SUPPORT EQUIPMENT

This chapter describes support and test equipment, including all common and special tools, as well as any connectors or other interface devices necessary to connect the support equipment to the end item or Unit Under Test (UUT). Questions concerning repair, replacement or calibration should be referred to AML-4060 at (405) 954-2165.

### 5.1 COMMON TOOLS AND TEST EQUIPMENT

**Common Tools**: The required common tools for maintaining RDVS IIA equipment on site are common throughout the FAA and are part of the Standard Electronics Technician tool kit.

**Common Test Equipment**: Common test equipment required to support the RDVS IIA already exists in the FAA inventory, hence common tools and test equipment are available in the field.

The following common test equipment is required to support the RDVS IIA system:

1. Multimeter - 8060A;
2. Oscilloscope – HP 7623A;
3. TIMS – HP 4934A;
4. Dual banana to Dual banana test cable (6') – 2BB-36

### 5.2 SPECIAL TOOLS AND TEST EQUIPMENT

Litton Denro is responsible for identifying and delivering all special tools and special test equipment that is required for site maintenance with the site's equipment.

The following are the special tools and test equipment required to support the RDVS IIA:

1. Push To Talk (PTT) Box, part number 2008228-1
2. Microphone Transformer Box, part number 2008171-1

## CHAPTER 6. TRAINING, TRAINING SUPPORT AND PERSONNEL SKILLS

The purpose of this chapter is to provide information that describes training requirements of FAA personnel responsible for the maintenance and operation of the RDVS IIA. This section serve as the foundation for transition and site-specific training plans and contributes to the planning managing, developing and conduct of the initial training. All training requirements and course prerequisites are identified.

### 6.1 AIR TRAFFIC (AT) TRAINING

Training requirements have been developed and fully coordinated by appropriate Air Traffic functional organizations.

1. Facilities requiring training prior to the release of Computer Based Instruction (CBI) will receive conventional training by FAA AT instructors or will receive the CBI training on a special CD. The special CD courses must be loaded as a local course until it is distributed in the quarterly distribution. Training will be concurrent with equipment installation.

    a. Operator Course: Length is estimated to be 4 hours. Required for all personnel who will be operating the system. After the completion of the CBI training course, specialist will be briefed on how their site's system is configured. This is a site-specific briefing that must be developed at each facility based on the configuration of the system. This can be a pre-duty briefing but is required as part of the training program.

    b. Supervisor Course: Length is estimated to be 3 hours. Required for all supervisory personnel who have completed the operator's course. Course provides instruction for system operation, configuring and re-configuring the system, position set-up information, system communications, and identifies error messages/indications.

    c. System Administrator Course: Length is estimated to be 6 hours. Require for selected supervisory and staff personnel who have completed the operator's and supervisor courses. This course provide instruction for system operation, map editing, source file editing, system generation, configuration/re-configuring system, rebuilding configuration maps, CCT/QCT system manipulation, user privileges and response to error messages.

2. Training Materials. The CBI training will be distributed to all field facilities in the CBI quarterly distribution on July 12, 1998.

3. Computer Based Instruction (CBI) Operator, and Supervisor and System Administrator Courses. Performance Technology International, Inc. shall be responsible for developing CBI for Operators, Supervisors and System Administrator using best commercial practices. There will be a total of three CBI courses based on the Enhanced Type baseline. After the CBI training package is approved, CBI shall be the preferred method for conducting Operator and Supervisor training.

    The CBI operator, supervisor and system administrator courses shall be presented on compact disk-read only memory (CD-ROM) media. The interactive instruction and testing of RDVS IIA hardware, software and functional characteristics to be presented on the computer display. Instruction that describes the CBI courseware and its use shall be furnished with the software as a test file on the

CD. The CBI will be provided to the Government in two separate deliverables. The first will contain the executable program. The second will contain the source code and all graphics and library files used to create the executable program. Each of these deliverables shall be provided without copyright restrictions and will be freely reproducible by the Government.

The CBI courseware will operate on the FAA Computer Based Instruction platform that, at a minimum, consists of a 486/33 computer equipped with 16 mega bytes (MB) random access memory (RAM), CD-ROM player, and sound card.

CBI courseware shall be divided into three distinct courses, Course 57075, RDVS IIA Touch Entry Device (TED) Operator, Course 57076, System Administrator and Course 57077, RDVS IIA Supervisor Course.

Controllers will be required to complete the TED course. The TED CBI course will take approximately 4 hours to complete.

Supervisors and staff specialists designated by the facility manager shall complete the operator course and the Supervisor course. This portion of the CBI course will take approximately 7 hours to complete.

a. The operator courseware will permit RDVS IIA position equipment to be displayed on a computer monitor. The student will be able to display the applicable operator panel TED and operate the controls displayed on the screen via computer keyboard and/or mouse. The software will respond to student control adjustments by simulating expected equipment responses; for example, microphone activation's audible responses, visual displays, proper feedback for incorrect responses, etc.

b. The supervisor courseware will build on the training provided in the operator courses. Training will incorporate generic configuration and reconfiguration map sets to replicate typical system responses and visual displays the Supervisor encounters when configuring and reconfiguring the system to meet operational and staffing requirements. The training will also include identifying, executing and responding to system commands and error messages. The Supervisor course will emphasize the mechanics of moving through the configuration events and understand the flow of data input needed to get the RDVS IIA up and running initially.

c. A select group of individuals will also be trained in System Administration function, they must have completed the conventional or CBI TED and the Supervisor course, plus they must be able to demonstrate a fundamental knowledge of the DOS operating system and associated commands. Knowledge of DOS will NOT be a part of the System Administrator training. This training is directed toward airway facilities technicians and a select group of air traffic personnel. It will be provided in both CBI and conventional format. Conventional training will be provide in the RDVS IIA Hardware Maintenance course as a separate course and taught by airway facilities Academy instructors. (See Airway Facilities training for more details on System Administrator training.)

The following is a list of CBI course numbers:

| Course | CBI |
|---|---|
| TED | 57075 |
| Supervisor | 57077 |
| System Administrator | 57076 |

System Administrator CBI training will be available to all facilities in the CBI distribution scheduled for July 1, 1998. Development of the course is expected to be complete by May, 1998. Facilities receiving the system prior to July 1 should contact the program office to receive this training on a special CD.

## 6.2 AIRWAY FACILITIES (AF) TRAINING

AF training requirements were developed by AFZ-100 and coordinated with AMA-410.

1. Orientation Course

The Orientation course provides an overview of Litton's installation and testing procedures and provides a detailed orientation of the RDVS IIA functionality and site operator and maintenance personnel responsibilities. Orientation course taught by the contractor at Litton's facilities, course length approximately 24 hours. The course number assigned for these classes is Course Number 48265. Three (3) classes were completed in June 1997.

2. Engineering Support Services Course

This course will provide, as minimum, details technical instruction, including hands-on training for Government personnel, e.g., AOS-510, responsible for second level hardware, software and firmware support, for the RDVS IIA equipment and system. Training will be conducted at the FAA Academy, course length approximately 80 hours.

3. Training Materials

The initial training materials is provided by the contractor in accordance with Best Commercial Practice and Standards. RDVS I and II training materials developed under contracts DTFA01-93-C-00074 and DTFA01-95-C-00004 will be used to the maximum extent possible, including the Large Baseline Operator's and System User Manuals. Course materials and manuals will be updated to reflect the RDVS IIA systems. All student training materials are to be left with the student.

4. RDVS IIA Hardware Maintenance Course

This Hardware (HW) Maintenance course." will provide, detailed technical instructions, including hands-on training for site maintenance. In addition to the HW maintenance course will be the System Administrator training now called the "Source File Editing". This training provided instruction for system operation, map editing, source file editing, system generation, configuration/reconfiguring system, rebuilding configuration maps, CCT/OCT system manipulation, user privileges and response to error messages. This training is intended for the AF technicians responsible for site/field maintenance of RDVS IIA equipment. Course description can be found in the FAA catalog.

An RDVS IIA system is installed at the FAA Academy (FAAAC) for hardware maintenance training. Initial training quotas for site are determined by AFZ-100. Attrition training quotas for this course will be obtained through the "Call for Training". The HW maintenance course number assigned for these classes at FAAAC is Course Number 40042. The Hardware Maintenance course will be approximately 64 hours long. Each class will accommodate up to twelve (12) students.

5. Prerequisite

Participates in the Orientation course will be Government personnel concerned with the installation, testing, and acceptance of the RDVS IIA equipment.

Participants in the Engineering Support Service Course will be electronic technician or engineer with experience in the repair of communication switching equipment and proficient in programming software.

Participants in the Hardware Maintenance course will be electronics technicians or engineers with experience in repair of communication switching.

## CHAPTER 7. DIRECT WORK MAINTENANCE STAFFING

This chapter identifies direct work employee hours required to perform all maintenance activities necessary to maintain the RDVS IIA equipment.

Maintenance staffing levels are derived by AFZ-200 in accordance with FAA Order 1380.40C and FAA Order 1375.4A. The direct work requirements are presented in Table 7.0-1.

TABLE 7.0-1, RDVS IIA DIRECT WORK REQUIREMENTS

{System Specialist Staff Years}

| Facility Code | Class | Number of Switching Positions | Recurring | Non-Recurring | Total |
|---|---|---|---|---|---|
| 48HB | B | 5-8 | 0.036 | 0.179 | 0.215 |
| 48HB | C | 9-12 | 0.038 | 0.179 | 0.217 |
| 48HB | D | 13-18 | 0.040 | 0.179 | 0.219 |
| 48HB | E | 19-24 | 0.042 | 0.179 | 0.221 |
| 48HB | F | 25-30 | 0.044 | 0.179 | 0.223 |
| 48HB | G | 31-35 | 0.046 | 0.179 | 0.225 |
| 48HB | H | 36-40 | 0.048 | 0.179 | 0.227 |
| 48HB | J | 41-45 | 0.050 | 0.179 | 0.229 |
| 48HB | K | 46-50 | 0.052 | 0.179 | 0.231 |
| 48HB | L | 51-55 | 0.054 | 0.179 | 0.233 |
| 48HB | M | 56-60 | 0.056 | 0.179 | 0.235 |
| 48HB | N | 61-65 | 0.058 | 0.179 | 0.237 |
| 48HB | P | 66-75 | 0.061 | 0.179 | 0.240 |
| 48HB | Q | 76-100 | 0.073 | 0.179 | 0.252 |
| 48HB | R | 101-125 | 0.079 | 0.179 | 0.258 |
| 48HB | S | 126-160 | 0.084 | 0.179 | 0.263 |

## CHAPTER 8. MAINTENANCE SUPPORT FACILITIES

This chapter describes space and facility requirements for maintenance of the RDVS IIA components and for storage space for spares and support equipment.

### 8.1 CONTRACTOR RESPONSIBILITIES

Litton Denro is configuring the RDVS IIA to fit within existing facilities. Litton Denro will notify the Government of any special support facility requirements identified during the site surveys.

### 8.2 GOVERNMENT RESPONSIBILITIES

No special requirements have been identified by the Government for maintenance support facilities.

## CHAPTER 9. PACKAGING, HANDLING, STORAGE AND TRANSPORTATION (PHS&T)

This chapter describes the Packaging, Handling, Storage, and Transportation (PHS&T) requirements for shipment of the RDVS IIA equipment and for the supporting equipment and spares.

### 9.1 PACKAGING AND PACKING

All equipment, and components, shipped to the destination will be packaged and marked in accordance with best commercial practices. All spares, shipped to the destination will be individually packaged and placed in a protective sealed bag.

E&R items will be packaged and shipped in reusable-type containers to facilitate round trip shipments between the facilities and the repair source.

### 9.2 HANDLING AND MARKING

The contractor will be responsible for providing material handling equipment, personnel and other resource necessary for the loading, block, and bracing of items to be shipped and for the on-site loading or unloading of material associated with the installation of the RDVS IIA equipment.

### 9.3 STORAGE

There are no storage requirements for the Litton Denro RDVS IIA.

### 9.4 TRANSPORTATION

User sites, and the contractor will use the established FAA guidelines for shipping and transporting E&R LRUs by the most economic means considering dependability, safety, urgency of the least costly mode to meet these considerations.

## CHAPTER 10. TECHNICAL DATA

This chapter describes the RDVS IIA project technical data requirements for documentation developed by the contractor and/or by the Government.

### 10.1 TECHNICAL DATA REQUIREMENTS

The contractor will deliver technical data for the RDVS IIA project in accordance with the contract Statement of Work (SOW).

### 10.2 TECHNICAL MANUALS AND INSTRUCTION BOOKS

Litton Denro is responsible for providing the following manuals:

| | | |
|---|---|---|
| 1. | Operator Manual | Litton Denro RDVS IIA 3080-E, Kansas City TPM9450103, NSN 0056-00-480-0473<br>Litton Denro RDVS IIA 3080-F, Enhanced TPM996201, NSN 0056-00-480-0475<br>Litton Denro RDVS IIA 3080-H, Large TRACON TPM9903100, NSN 0056-00-480-0478 |
| 2. | User's Manual | Litton Denro RDVS IIA 3080-E, Kansas City TPM9350301, NSN 0056-00-480-0474<br>Litton Denro RDVS IIA 3080-F, Enhanced TPM9803300<br>Litton Denro RDVS IIA 3080-H, Large TRACON |
| 3. | O&M Manual | Litton Denro RDVS IIA 3080-E, Kansas City TPM9350203, NSN 0056-00-480-0293<br>Litton Denro RDVS IIA 3080-F, Enhanced TPM9803200, NSN 0056-00-480-0476<br>Litton Denro RDVS IIA 3080-H, Large TRACON TPM9807200, NSN 0056-00-480-0477 |
| 4. | Administrator's Manual | Litton Denro RDVS IIA |

#### 10.2.1 Operator's Manual

Litton Denro will deliver three (3) operator's manuals in accordance with the RDVS IIA contract for Government review and approval. The Kansas City baseline, the Enhancement baselines and the large TRACON's baseline such as SCT, NCT, NYT, Potomac MCF and Atlanta Metroplex will have their own standalone manual. These manuals will explain the operator control and indicators for the RDVS IIA system.

10.2.2 System User's Manual

Litton Denro will deliver three (3) system user's manuals in accordance with the RDVS IIA contract for Government review and approval. The Kansas City baseline, the Enhancement baselines and the large TRACON's baseline such as SCT, NCT, NYT, Potomac MCF and Atlanta Metroplex will have their own standalone manual. These manuals will explain the use of the Configuration Control Terminal (CCT) and the Quality Control Terminal (QCT) for the large Baseline System. These manuals will be updated to show the current CCT and QCT screens. The off-line Operations - Source File Editing CCT and QCT section will be updated to discuss the current editing options and potential conflict between the options.

10.2.3 Operations and Maintenance (O&M) Manual

Litton Denro will deliver for Government review and approval three (3) different O&M manuals to support the installation, operation, and maintenance of the RDVS IIA hardware. The Kansas City baseline, the Enhancement baselines and the large TRACON's baselines such as SCT, NCT, NYT, Potomac MCF and Atlanta Metroplex will have their own standalone manual. These manuals will include parts list and drawings, revised Section 6 and 7, Installation, Integration and Checkout Section, Section 9, Computer Software Section, Section 10, and Troubleshooting Support Data Section, Section 11.

10.2.4 Operations and Maintenance (O&M) Manual Supplements

Litton Denro will develop and delivery two O&M manual supplements to the 3080H O&M Manual. One supplement will address the Austin configuration (remoting positions and via fiber optics). The other will address the St, Louis configuration (remoting backroom equipment via Bridge Control Units and fiber optics). These manuals will include parts list and drawings, revised Section 6 and 7, Installation, Integration and Checkout Section, Section 9, Computer Software Section, Section 10, and Troubleshooting Support Data Section, Section 11.

10.2.5 System Administrator's Manual

Litton Denro will deliver for Government review and approval a System Administrator's manual to support off-line Operations - Source File Editing CCT and QCT section. The manual will include the current editing options and potential conflict between the options.

## 10.3 CONFIGURATION MANAGEMENT

The following maintenance handbook for the RDVS IIA system has been developed by AOS-510 for field use: Maintenance of terminal Air/ Ground Communications Facilities, TI 6480.6B.

The contractor will provide a Configuration Management Plan (CMP) in accordance with FAA-STD-021A. This plan is to aid in maintaining configuration control of the RDVS IIA system hardware, software, and support equipment.

A CMP describing procedures for baseline identification and control, as well as a functional and physical audit and configuration status accounting of hardware, software, firmware, documentation, and support equipment which will be provided by the contractor.

## APPENDIX A. REFERENCE DOCUMENTS

| Number | Title |
|---|---|
| ASTM-D-3951 | Standard Practices for Commercial Packaging |
| FAA Order 1320.48 | Engineering Field Support Sector Maintenance Program Procedures |
| FAA Order 1375.4A | Standard Data Elements and Code Facility Identification and Supplemental Standards, April 27, 1984, C4-January 22, 1991 |
| FAA Order 1380.40C | Airways Facilities Sector Level Staffing Standards System, January 17, 1986 |
| FAA Order-1800.58A | National Airspace Integrated Logistics Support (NAILS) Policy |
| FAA Order 4800.2C | Utilization and Distribution of Excess and surplus Personnel Property |
| FAA Order 6000.15B | General Maintenance Handbook for Airway Facilities |
| FAA Order 6000.30B | Policy for Maintenance of the NAS through the Year 2000 |
| FAA STD-021A | Configuration Management, Contractor Requirements |
| MIL-STD-129L | Marking for Shipment and Storage |
| MIL-STD-2073-1 | DOD Material Procedures for Development and Application of Packaging Requirements |
| NSN 0056-00-480-0441 | FAA Disposal Guide Publication #329935 |
| NSN 0056-00-480-0058 | ICSS Type I, TIB Volume I |
| NSN 0056-00-480-0059 | ICSS Type I, TIB Volume II |
| NSN 0056-00-480-0174 | ICSS Type IA, TIB |
| SC4403-96122-001 | Interagency Support Agreement |
| TPM9450103 | Litton Denro RDVS IIA 3080-E Operator's Manual |
| TPM996201 | Litton Denro RDVS IIA 3080-F Operator's Manual |
| TPM9903100 | Litton Denro RDVS IIA 3080-H Operator's Manual |
| TPM TBA | Litton Denro RDVS IIA System Administrator’s Manual |
| TPM9350301 | Litton Denro RDVS IIA 3080-E System User’s Manual |
| TPM9803300 | Litton Denro RDVS IIA 3080-F System User’s Manual |
| TPM TBA | Litton Denro RDVS IIA 3080-H System User’s Manual |
| TPM9350203 | Litton Denro RDVS IIA 3080-E O&M Manual |

| | |
|---|---|
| TPM9803200 | Litton Denro RDVS IIA 3080-F O&M Manual |
| TPM9807200 | Litton Denro RDVS IIA 3080-H O&M Manual |
| TI 6480.6B | Maintenance of terminal Air/Ground Communications Facilities |
| DTFA01-93-C-00074 | Rapid Deployment Voice Switch (RDVS)I Contract, July 1, 1993 |
| DTFA01-94-C-00026 | Operational Support Telephone System (OSTS) Contract, March 14, 1994 |
| DTFA01-95-C-00004 | Rapid Deployment Voice Switch (RDVS)II Contract, January 9, 1995 |
| DTFA01-95-Y-01014 | Voice Switch Bypass (VSBP) Contract, August 23, 1995 |
| DTFA01-97-C-00010 | Rapid Deployment Voice Switch (RDVS)IIA Contract, December 20, 1996 |
| AAF-1 Memorandum | Disposition Decision for Replacement Equipment, October 1, 1992 |

## APPENDIX B. ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| AF | Airway Facilities |
| A/G | Air-to-Ground |
| APL | Associate Product Lead |
| APLNI | Associate Product Lead for NAS Implementation |
| AT | Air Traffic |
| ATC | Air Traffic Control |
| ATCT | Airport Traffic Control Tower |
| ATS | Administrative Telephone System |
| CBI | Computer Based Instruction |
| CCT | Control Configuration Terminal |
| CD | Compact Disk |
| CM | Configuration Management |
| CMP | Configuration Management Plan |
| CO | Central Office |
| COTR | Contracting Officer's Technical Representatives |
| COTS | Commercial-off-the-shelf |
| CST | Central Standard Time |
| DOD | Department of Defense |
| DOT | Department of Transportation |
| DRMO | Defense Reutilization Marketing Offices |
| DRR | Deployment Readiness Review |
| EEMS | Electronic Equipment Modifications |
| E&R | Exchange and Repair |
| ETVS | Enhanced Terminal Voice Switch |
| FAA | Federal Aviation Administration |
| FAAAC | FAA Academy |
| FAALC | FAA Logistics Center |
| F&E | Facilities and Equipment |
| FCA | Functional Configuration Audit |
| FIT | Field Implementation Team |
| FPMR | Federal Property Management Regulations |
| Fsep | Facilities Systems Equipment Profile |
| FTS | Federal Telephone System |
| G/G | Ground-to-Ground |
| GSIP | Generic Site Implementation Plan |
| ICSS | Integrated Communications Switching System |
| IFR | Instrument Flight Rules |
| ILS | Integrated Logistics Support |

| | |
|---|---|
| ILSP | Integrated Logistics Support Plan |
| IOM | Installation, Operation, and Maintenance |
| IPT | Integrated Product Team |
| LIS | Logistics Inventory System |
| LRU | Line Replaceable Unit |
| MB | Mega Bits |
| MMAC | Mike Monroney Aeronautical Center |
| NAILS | National Airspace Integrated Logistics Support |
| NAS | National Airspace System |
| NDI | Non Developmental Item |
| NISC | NAS Implementation Support Contractor |
| O&M | Operations and Maintenance |
| OSTS | Operational Support Telephone System |
| PBX | Private Automatic Branch Exchange |
| PASS | Professional Airway System Specialist |
| PCA | Physical Configuration Audit |
| PHS&T | Packaging, Handling, Shipping and Transportation |
| PIP | Implementation Plan |
| PL | Product Lead |
| PM | Program Manager |
| POC | Point of Contact |
| PTT | Push To Talk |
| QCT | Quality Control Terminal |
| RAM | Random Access Memory |
| RAPM | Regional Associate Program Manager |
| RCE | Radio Control Equipment |
| RDVS | Rapid Deployment Voice Switch |
| RFP | Request For Proposal |
| ROM | Read Only Memory |
| SIP | Site Installation Plan |
| SMO | System Management Offices |
| SOW | Statement of Work |
| STVS | Small Tower Voice Switch |
| TBA | To Be Assigned |
| TED | Touch Entry Display |
| TIM | Technical Interchange Meeting |
| TRACON | Terminal Radar Approach Control (facility) |
| TSR | Telecommunications Service Request |
| TVSR | Terminal Voice Switch Replacement |

| | |
|---|---|
| UUT | Unit Under Test |
| VFSS | Voice Frequency Signaling System |
| VHF | Very High Frequency |
| VSBP | Voice Switch bypass |
| VSRPT | Voice Switch and Recording Integrated Product Team |
| UHF | Ultra High Frequency |
| WATS | Wide Area Telephone System |

## APPENDIX C. DEFINITIONS

Integrated Logistic Support (ILS): An interrelated, unified, and iterative approach to the management and technical activities that cause support considerations to influence requirements and design, defines support requirements that have an optimal relationship to the system design and to each other, results in acquisition of the full range of system support requirements, and ensures support during system operation at minimum cost.

Integrated Logistic Support Plan (ILSP): A document that describes the integrated logistics support program requirements., tasks, and milestones for an acquisition program. The ILSP is developed under direction of the APLL with input from the NAILSMT. The ILSP is an iterative document and is updated foe each key decision.

Line Replaceable Unit (LRU): An item which may consist of a unit, an assembly (circuit card assembly, electronic component assembly, etc.), a subassembly, or a part, that is removed and replaced at the site-maintenance level to restore the system/equipment to its operational status.

The lowest unit to be replaced within the system during site maintenance. It is a separate, installable, physical package performing a single function or group of closely related functions.

## APPENDIX D. POINTS OF CONTACT LIST

WASHINGTON HEADQUARTERS PERSONNEL

| | | |
|---|---|---|
| | AND-320, IPT | |
| - | Jim Little | (202) 493-4651 |
| - | Ed Hand | (202) 493-4792 |
| - | Jamie Patel, TRW | (202) 651-2302 |
| | ARN-200, APL for Logistics | |
| - | George Clark | (202) 493-4789 |
| - | Bill Howard, AT Requirements (acting) | (202) 493-0707 |
| - | Bill Howard, AF Requirements | (202) 493-0707 |
| - | Wayne Matthiesen, NISC | (202) 646-5364 |
| | ACT-340C, FAA Technical Center | |
| - | Tom Culp | (609) 485-4396 |
| - | Mike Dow | (609) 485-7084 |
| | AFZ-100, AF Training | |
| - | Dan Hargraves | (202) 267-3044 |
| - | Robert Stafford, NISC | (202) 646-5720 |
| | ANS-700, APL NAS Implementation | |
| - | Vinold Bhatnagar | (202) 493-4783 |
| - | Doug Spandus, NISC | (202) 646-2197 |
| | AOP-500, Vintage Switch Program | |
| - | Michael Sullivan | (202) 267-3062 |
| - | Roslyn Ward | (202) 484-2534 |
| | ASU-330, Contracting Officer | |
| - | Steve Bobby | (202) 493-4786 |
| - | Bob Perry, CEXEC | (202) 554-3952 X311 |
| | ATX-100, AT Training | |
| - | Mike Coffelt | (405) 954-0786 |

MIKE MONRONEY AERONAUTICAL CENTER (MMAC) PERSONNEL

| | | |
|---|---|---|
| | AMP-1A, MMAC | |
| - | Kenneth Frengs | (405) 954-8537 |
| - | C. R. Blankenship, NISC | (405) 954-8574 |
| | FAA Logistic Center | |
| | AML-6000, Integrated Products Management | |
| - | Regina West | (405) 954-5627 |
| - | Customer Care Center | 1-888-322-9824<br>(405) 954-3793 |
| | FAA Academy | |
| | AMA-410, AF Training | |
| - | Mike McKenzie | (405) 954-3631 |
| | AOS-510, 2nd Level Support | |
| - | John Miller | (405) 954-5200 |
| | AOS-510 Hotline:<br>(405) 954-0066 (0800-1630 CST, weekdays)<br>(405) 954-3583 (1630-0800, CST, evenings, weekends, holidays) | |

REGIONAL ASSOCIATE PROGRAM MANAGERS (RAPMs)

| | | |
|---|---|---|
| | ANI-700, Alaska Region | |
| - | Mel Leskinen | (907) 271-5199 |
| | ANI-500, Central Region | |
| - | Doug Edwards | (816) 329-3517 |
| | ANI-200, Eastern Region | |
| - | Steve LoVerde | (718) 553-3469 |
| | ANI-400, Great Lakes Region | |
| - | Doug Weaver | (847) 294-8187 |
| | ANI-100, New England Region | |
| - | Jack Emberg | (617) 238-7808 |
| | ANI-800, Northwest Mountain Region | |
| - | Jackie Baldwin | (206) 227-2435 |
| | ANI-300, Southern Region | |
| - | Steve Duckett | (404) 305-6527 |
| | ANI-600, Southwest Region | |
| - | Melissa Nelson | (817) 222-4680 |
| - | Rich Anderson, NISC | (817) 222-4215 |
| | ANI-900, Western Pacific Region | |
| - | Gary Pettengill | (310) 725-3495 |

EQUIPMENT CONTRACTORS

| | | |
|---|---|---|
| | Litton Denro | |
| - | Jack Crifasi | (301) 840-1597 |
| - | Al Brynm | (301) 869-1628 |
| - | Randy Ranzetti, AT Training | (301) 869-1628 |
| | DME Corporation Personnel (VSBP) | |
| - | Reception | (301) 975-2100 |
| - | Rick Clingan | (301) 975-2188 |
| - | Ron Driest, FAA QRO | (301) 975-2260 |
| | EXECUTONE INFORMATION SYSTEMS (OSTS) | |
| - | Hotline: | 1-800-678-9866 |

**APPENDIX E. OPERATIONAL SUPPORT TELEPHONE SYSTEM (OSTS)**

## TABLE OF CONTENTS

## CHAPTER 1. INTRODUCTION

This appendix was developed to provide guidance for integrated logistics support planning and execution of support requirements for the Operational Support Telephone System (OSTS). The OSTS will replace the Administrative Telephone System (ATS) used by the electro-mechanical switches when the switch is replaced.

The scope of the OSTS project is limited to those projects that are a part of the Terminal Voice Switch Replacement (TVSR) program. These projects include the Integrated Communications Switching System (ICSS), Small Tower Voice Switch (STVS), Rapid Deployment Voice Switch (RDVS) and Enhanced Terminal Voice Switch (ETVS) procurements.

The OSTS will be provided to the sites that meet the following criteria:

a. The site must have a voice switch that is being replaced by the TVSR Program, and;

b. The administrative telephone service at the site will be lost when the existing voice switch equipment is removed.

In addition, some "freestanding" telephone systems that are not integrated with the air traffic control switch at a TVSR site may require replacement if they are unable to provide an interface for the TVSR voice switch, e.g., a two wire or "off premises extension" interface.

The exact number of OSTS systems required to support the Federal Aviation Administration (FAA) requirements are to be determined (TBD).

### 1.1 SYSTEM DESCRIPTION

The OSTS is a commercial-off-the-shelf (COTS) telephone system that provides routine administrative communications service. It interfaces with the operational voice switch to provide supervisory access and serves as a backup for ground-to-ground (G/G) communications. The OSTS has been designed to meet all functional performance requirements throughout a service life of at least 10 years of continuous use.

### 1.2 CONTRACT MILESTONE

The OSTS contract, DTFA01-94-C-00026 was awarded to Executone Information Systems, Fairfax, Virginia, on March 14, 1994.

### 1.3 INTERFACE REQUIREMENTS AND CAPABILITIES

The OSTS has the following interface requirements and functional capabilities:

a. Accommodates up to 64 stations in addition to trunking requirements;

b. Multiple access capabilities;

c. Two wire touch tone capability;

d. Call hold, intercom calling, night answer capability;

e. Caller ID display both internal and (optional) external;

f. Battery backup and station message detail recording.

## CHAPTER 2. LOGISTICS MANAGEMENT

### 2.1 MAINTENANCE SUPPORT

The contractor will perform all site and depot-level maintenance, beginning from site acceptance and through the end of the contract. AOS-100 will identify the source(s) for maintenance support before the current maintenance contract expires (Year 2001). While the contract is in force, Executone will maintain a 24-hour toll-free number (1-800-678-9866) for the Government personnel to use for reporting/logging all trouble reports, both during and after the warranty period.

#### 2.1.1 Warranty Repair

The contractor's warranty coverage for each system commences upon Government acceptance of the system. Beginning with Government acceptance, and for 12 months thereafter, and without charge to the Government, the contractor will provide all parts and labor to correct all failures due to defects in workmanship or materials of each and related equipment and materials furnished by the contractor under the OSTS contract. This warranty covers the following (except as noted).

a. Scope: The contractor will furnish all parts, materials, labor, supporting equipment and services required to perform warranty services, and will bear all incidental expenses (e.g., travel). The Contractor will understand the term "warranty" to mean fault localizing and correction (through repair or replacement of parts) of inherent system faults and failures of all equipment furnished under the OSTS contract (including software, peripheral equipment, and cabling).

b. Response Time: The contractor will ensure that all failures (except those classified as **emergency maintenance** in section 2.1.2.c below ) are corrected by the end of the next business day during which the original trouble report was filed, i.e., between 8:00 AM to 5:00 PM, Government facility local time, Mondays through Fridays, excluding Federal holidays.

c. Emergency Maintenance: Emergency maintenance is defined as service that is required during evening, weekend, Federal holiday and those hours not currently covered under the response time, section 2.1.1.b above. Emergency maintenance service will be performed in accordance with all the provisions of Section C.3.5, Maintenance, of the OSTS contract.

   The response time for a "Major Outage" (defined by the OSTS Contract Mod 0057 as: "When 50% or more of the OSTS system is inoperable") will be within 3 hours after receipt of an emergency service call. All other Emergency Maintenance requested will be performed by the end of the next day. Should the repair/response take place during regular business hours as described in section 2.1.1.b above, it will not be considered emergency maintenance.

Upon receipt of an emergency service call, the contractor will notify the FAA in order that a Task Order may be initiated. The contractor will invoice the designated Task Order with attached emergency work site Labor Actual with an additional 15% administrative fee. Parts are not to be invoiced as they are covered under the warranty.

### 2.1.2 Contractor Support

Beginning with the conclusion of the warranty period, the Contractor will provide the following maintenance services for a fixed monthly charge per system as identified in the contract.

a. Scope: Furnish all parts, materials, labor, supporting equipment and services required to perform site and depot-level maintenance, and bear all incidental expenses (e.g., CONUS travel) related to any site maintenance performed. The Contractor will understand the term "maintenance" to mean fault localizing and correction (through repair or replacement of parts) of inherent system faults and failures, as well as preventive maintenance (as may be required), of all equipment furnished under this contract (including software, peripheral equipment, and cabling).

b. Response Time: Ensure that all failures (except those classified as emergency maintenance in section 2.1.2.d below) are corrected by the end of the next business day during which the original trouble report was filed. Business hours are understood to run between 8:00 AM and 5:00 PM, Government facility local time, Mondays through Fridays, excluding Federal holidays. (See Emergency Maintenance 2.1.2.d below).

c. Repair and Return Service: Offer the following repair and return services for items that can be easily removed and shipped by Government personnel (e.g., station sets, handsets, cords), subject to the following requirements:

1) The contractor will prepay the shipment from the OSTS site and arrange for pickup (e.g., by a commercial parcel delivery service).

2) The contractor will repair or replace the defective component and ship it back to the site within 18 business hours of receipt.

d. **Emergency Maintenance**. Emergency maintenance is defined as service that is required during evening, weekend, Federal holiday and those hours not currently covered under the maintenance provisions of section 2.1.2.b, Response Time, above. Emergency maintenance service will be performed in accordance with all the provisions of Section C.3.5, Maintenance, of the OSTS contract.

Response time for a **"Major Outage"** (defined by OSTS Contract Mod 0057 as: "When 50% or more of the OSTS system is inoperable") will be within 3 hours after receipt of an emergency service call. All Other Emergency Maintenance requested will be performed by the end of the next day. Should the repair/response take place during regular business hours as described in section 2.1.2.b above, it will not be considered emergency maintenance.

Upon receipt of an emergency service call, the contractor will notify the FAA in order that a Task Order may be initiated. The contractor will invoice the designated Task Order with attached emergency work site Labor Actual with an additional 15% administrative fee. Parts are not to be invoiced as they are covered under "Maintenance". (Reference OSTS Contract Mod 0046.)

## CHAPTER 3. SUPPORT EQUIPMENT

The contractor will provide any support equipment required.

## CHAPTER 4. TRAINING SUPPORT

The contractor will provide the instructor personnel and the materials required for the training. The training will include the following:

a. General orientation and user training. Operate the system to place calls, receive calls, and operate all user calling features.

b. Attendant training. Operate the attendant position utilizing user calling features and all attendant calling features, to place, answer, and direct calls, and to use its special features.

c. Administrative support training. Operate all remaining features and capabilities of the system including performing moves and changes, programming call restrictions, collecting call accounting data, responding to alarms, and logging trouble reports.

d. Scheduling. Conduct training scheduled by the Government during normal business hours.

e. Training Materials. Provide copies of all written training materials to each person attending the training.

## CHAPTER 5. PACKAGING, HANDLING, STORAGE, AND TRANSPORTATION

The contractor will deliver, unpack, and assemble the OSTS equipment; and prepare the wiring for installation. This includes moving the distribution station equipment to its intended location within the facility, and setting up and connecting the optional OSTS equipment features.

The contractor will remove from the facility and dispose of all packing material and debris associated with OSTS installation, warranty, and maintenance activities.

## CHAPTER 6. DOCUMENTATION

### 6.1 USER'S GUIDE

The contractor delivers a User's Guide to each site. The Guide provides detailed information for using the multi-button telephone, describes how to use the OSTS system to initiate and receive calls, and how to activate call features.

### 6.2 PROGRAMMING AND MAINTENANCE GUIDE

The contractor delivers a Programming and Maintenance Guide to each site. The Guide provides detailed information for programming the OSTS administrative terminal.

### 6.3 REPRODUCTION

The OSTS contract allows the Government to reproduce (e.g., photocopy) OSTS documentation freely, without restriction, for use by personnel in operating the OSTS. Sites requiring additional copies of the guides should reproduce them locally.

## CHAPTER 7. DISPLACED EQUIPMENT AND SUPPORTING SPARES

Leased equipment and spares displaced by the OSTS equipment will be removed and disposed of in accordance with previous agreements between the Government and the lease holder.

The Government is responsible for removing all existing telephone equipment. Government owned equipment and spares displaced by the OSTS will be removed and disposed of in accordance with FAA Order 4800.2C and AAF-1 Memorandum, "Disposition Decisions for Replaced Equipments", dated October 1, 1992.

**APPENDIX F. VOICE SWITCH BYPASS (VSBP)**

TABLE OF CONTENTS

## CHAPTER 1. INTRODUCTION

This appendix was developed to provide guidance for integrated logistics support planning and execution of support requirements for the Voice Switch Bypass (VSBP).

The scope of the VSBP project is limited to the projects in the Terminal Voice Switch Replacement (TVSR) program. The TVSR projects include the Integrated Communications Switching System (ICSS), Small Tower Voice Switch (STVS), Rapid Deployment Voice Switch (RDVS) and Enhanced Terminal Voice Switch (ETVS) systems.

### 1.1 SYSTEM DESCRIPTION

The VSBP provides air traffic control (ATC) facilities with EMERGENCY access to and control over Government-furnished very high frequency (VHF) and ultra high frequency (UHF) radio receiver/transmitters and associated signaling systems. The air-to-ground (A/G) connectivity provided via the VSBP enables air traffic controllers to establish and maintain communications with aircraft.

The VSBP will be installed in FAA terminal radar approach control (TRACON) and air traffic control tower (ATCT) facilities that operate under instrument flight rules (IFRs). Within these facilities, designated air traffic control (ATC) positions equipped with a VSBP jackbox will be provided an emergency A/G communications capability in the event of an ICSS, STVS, RDVS, and or ETVS switch failure.

### 1.2 PROJECT MILESTONES

VSBP logistics milestones are shown in Table 1.5-1.

TABLE 1.5-1 MILESTONES

| Event | Date |
|---|---|
| Statement of Work (SOW) Preparation | January-April 1995 |
| PASS Union Briefed | July 20, 1995 |
| Contract DTFA01-95-Y-01014 , Awarded to DME Corporation, Ft. Lauderdale, FL | August 23, 1995 |
| Logistics & Training Guidance Conferences | September 1995 |
| OT&E/Shakedown Test | February-April 1996 |
| FCA/PCA | March 1996 |
| First Production Unit Delivered to Chicago (O'Hare) | June 1996 |
| DRR EXCOM | June 20, 1996 |

## CHAPTER 2. LOGISTICS MANAGEMENT

The FAA Logistics Center (FAALC) is responsible for managing the supply and maintenance support program for the VSBP. Warranty claims, requisition issues and questions should be directed to the FAALC Customer Care Center at Toll Free at 1-888-322-9824, or (405) 954-3793. If the Customer Care Center cannot answer your questions they can ensure correct routing to an individual at the FAALC who can assist you.

Sites can also order replacement LRUs via the FAALC Logistics and Inventory System (LIS).

## CHAPTER 3. MAINTENANCE PLANNING

Since the VSBP will be used with and operate in conjunction with the ICSS, STVS, RDVS, and ETVS systems, ARN-200 has determined that the established and approved support concepts in the appropriate voice switching system ILSP (i.e., ICSS, STVS, RDVS, ETVS) will apply to the VSBP.

### 3.1 VSBP MAINTENANCE CONCEPT

The VSBP will be supported by two levels of maintenance: site/field and depot maintenance.

a. Site/field maintenance consists of the AF technician isolating the failure to the line replaceable unit (LRU) and replacing the failed item with a serviceable LRU.

b. Depot maintenance consists of FAALC repair (through the use of a contractor repair service or in-house resources) of faulty LRUs.

### 3.2 SECOND LEVEL ENGINEERING SUPPORT

When required, AOS-510 will obtain contractor technical assistance via the technical assistance options available in the VSBP contract.

### 3.3 WARRANTY PROGRAM

The Tellabs components used in the VSBP are covered by a 5 year Tellabs warranty. The VSBP components manufactured by DME, e.g., jackbox, backplane, cables are covered by a 3 year DME warranty. Warranty claims/questions should be directed to the Item Manager. (See Chapter 2, above.)

## CHAPTER 4. SUPPLY SUPPORT

FAALC will be responsible for providing supply support for the VSBP life cycle. Since the VSBP consist of a small number of LRUs, FAALC conducted an in-house mini-provisioning conference. Based on the results of the conference, FAALC cataloged the spares and AND-320/ASU-330 ordered the spares. FAALC has received the depot spares.

Sites can order replacement LRUs for the VSBP via the FAALC Logistics and Inventory System (LIS).

Assistance can be obtained from the **FAALC Customer Care Center Toll Free at 1-888-322-9824, or (405) 954-3793**. If the Customer Care Center cannot answer your questions they can ensure correct routing to an individual at the FAALC who can assist you**.**

## CHAPTER 5. SUPPORT EQUIPMENT

No special tools and test equipment are required to support the VSBP. Common tools and test equipment used to repair voice switching systems will be used to support the VSBP.

## CHAPTER 6. TRAINING

### 6.1 GENERAL INFORMATION

A training video tape for VSBP training will be delivered with the VSBP equipment. Air Traffic (AT) and Airway Facilities (AF) personnel will be trained using the training video. The video is divided into two parts. Part I describes the overall VSBP operation and demonstrates all of the VSBP functions. Part II provides information on isolating VSBP faults to the LRU level and demonstrates the corrective actions or alignments required to restore the system to service.

### 6.2 TRAINING OUTCOMES

After viewing the video and using the procedures described in the video and the Installation, Operation, and Maintenance (IOM) manual, the student will have knowledge of and be able to:

a. Operate the VSBP switch equipment;

b. Perform fault isolation, corrective maintenance and alignment(s) to restore the equipment performance to the parameters specified in the contract.

### 6.3 ATTRITION TRAINING

The sites are responsible for the initial and attrition VSBP training.

## CHAPTER 7. PACKAGING, HANDLING, STORAGE, AND TRANSPORTATION

DME will comply with all the packaging, handling, storage, and transportation (PHS&T) requirements specified in ASTM-D-3951, Standard Practices for Commercial Packaging; MIL-STD 2073-1, DOD Material Procedures for Development and Application of Packaging Requirements; and MIL-STD 129L, Marking for Shipment and Storage.

Sites and the contractor will use the established FAA guidelines for shipping and transporting LRUs by the most economical means available.

## CHAPTER 8. TECHNICAL DATA

### 8.1 INSTALLATION, OPERATION, AND MAINTENANCE (IOM) MANUAL

DME will deliver an IOM manual and an FAA Air Traffic Operations Concept document with each VSBP. The manual contains instructions and procedures for the installation, operation, and maintenance of the VSBP hardware and includes data and commercial drawings on all non-developmental items (NDI) and custom built items. The level of detail contained in the manual enables AT operators/supervisors to operate the VSBP and AF technicians to identify, isolate and correct hardware failures to the LRU level.

AOS-510 is the Government proponent for the IOM manual.

### 8.2 LIFE CYCLE PARTS AND SERVICE DATA

DME will deliver to the Government a complete set of technical data and documentation with updates as they are generated, including proprietary information on custom built items, which will enable the Government to assume full maintenance and technical support of the VSBP system equipment.

### 8.3 COPYRIGHT

The contractor delivers all VSBP data without restrictive legend(s) and the Government has the right to reproduce any of the data.

## CHAPTER 9. DISPOSITION OF DISPLACED EQUIPMENT AND SUPPORTING SPARES

Since the VSBP is not replacing any equipment, a disposal plan is not required.

## APPENDIX G. MAINTENANCE REPAIR SUPPORT FOR HEADSETS/PERIPHERALS

Attached is the memo that provides the instructions for maintenance repair support for headsets and peripherals on the voice switching systems. Please contact the **FAALC Customer Care Center for assistance at 1-888-322-9824 or (405) 954-3793** in lieu of Ms. Robin Stark.

# Memorandum

US Department
of Transportation

**Federal Aviation Administration**

Subject: ACTION: Maintenance Repair Support for Headsets/Peripherals on Voice Switching Systems

Date:

From: Manager, Communications and Navigation Division, ARN-200

Reply to Attn. of:

To: Distribution

Below are updated procedures regarding maintenance, repair, and support of the voice switch headsets and peripheral equipment. These procedures apply only to the below referenced voice switching systems that have been procured and/or managed by the Voice Switching and Recording Product Team, AND-320. This memorandum supersedes all previous direction provided regarding this issue.

If the type and manufacturer of the voice switch requiring support is not listed below, refer to your regional resources for instructions regarding support procedures. In all likelihood, a regional or local support contract is in effect.

Directions: Please identify the type and manufacturer of the voice switch at the facility requiring field support for headsets and/or peripheral equipment. Then reference the depicted support source in the adjacent column.

| Type and Manufacturer of Voice Switch | Support Source |
|---|---|
| Litton Type II ICSS | Litton-Amecom |
| Litton Type III ICSS | Litton-Amecom |
| Litton RDVS I or II | FAA Logistics Center |
| Litton RDVS IIA | FAA Logistics Center |
| | |
| Denro Type I ICSS | Denro |
| Denro Type III ICSS | FAA Logistics Center |
| Denro Model 466 ICSS (purchased GSA) | Denro |
| Denro Model 400 ICSS (purchased GSA) | FAA Logistics Center |
| Denro RDVS I | FAA Logistics Center |
| Denro RDVS II | FAA Logistics Center |
| Denro STVS | Denro (for 1 year from installation) |
| Denro STVS | FAA Logistics Center (after 1 year from installation) |
| Denro ETVS | FAA Logistics Center |

Contact telephone numbers:

- Litton-Amecom 1-800-847-7790
- Denro 1-800-952-2502
- FAA Logistics Center 1-405-954-7649

If you have any questions, please contact Mr. George Clark, ARN-200.3 at 202-493-4789.

//s//6/29/98

Janis E. Hooten

Distribution**:**
AAL-400/500
ACE-400/500
AEA-400/500
AGL-400/500
AMA-400/500
AML-200/600
AND-320
ANE-400/500
ANM-400/500
ASO-400/500
ASW-400/500
ATO-100/400
AWP-400/500

File:
WP: ARN-200\HDST

ARN-200.3:George clark:pb:493-0643:6/22/98

## APPENDIX H. DISPOSAL PLAN


# VOICE SWITCH DISPOSAL PLAN

December, 1998

Stephen R. Dash
Team Lead
Voice Switching and Recording

Product Team, AND-320

## Contents

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**Appendices**

## 1.0 Introduction

### 1.1 Purpose

The goal of this plan is to assist in the systematic removal of voice switching equipment end items, spares and peculiar support equipment from the FAA inventory as they are to be replaced by the Enhanced Terminal Voice Switch (ETVS) and Rapid Deployment Voice Switch (RDVS) IIA. In support of this goal, this plan addresses the requirements of FAA Order 4800.2, Utilization and Disposal of Excess Personal Property. This plan will serve to augment procedures established in Order 4800.2C and to address foreseeable changes in strategy. It is intended for distribution to all Regions, System Management Offices (SMO) and facilities with voice switches described herein. This plan will be made an attachment to Integrated Logistics Support Plans (ILSPs) for the voice switches to which it pertains and affects only FAA facilities. It does not apply to Department of Defense (DOD) facilities.

#### 1.1.1 Strategy

It shall be the strategy of the Voice Switching and Recording Integrated Product Team (VSRPT), AND-320, to affect removal of the affected equipment and systems from the NAS, to reutilize assets to the maximum extent practical and to conserve support resources consistent with optimum life-cycle cost. An integral part of this strategy will be utilization of a Telco Leased Telecommunications Program Division, AOP-500, contract with Lucent Technologies/AT&T (referred to herein as Lucent) to affect removals and disposal of the Integrated Communications Switching System (ICSS). In the absence of this resource, disposal will be handled locally through the processes defined in FAA Order 4800.2C.

Upon removal of the affected equipment, the Communications and Navigation Division, ARN-200, will coordinate cessation of support with the Regions and subsequently request the FAA Logistics Center (FAALC) to dispose of excess materials. Equipment which is declared as excess shall be disposed of in accordance with existing FAA policy and procedures as described herein. Further support to recipients of such equipment through sale or donation will not be available.

Total disposal shall be managed in accordance with the Federal Property Management Regulations (FPMR). Deviations from the procedures herein shall have prior approval from the VSRPT.

Questions regarding the disposal of equipment under this plan should be directed to Mr. Bill Howard, ARN-200, at (202) 493-0707

### 1.2 Background

#### 1.2.1 Life-Cycle Replacement System

The ETVS and RDVS IIA programs replace some 221 electromechanical and non-supportable electronic voice switching systems. Over 70% voice switches at air traffic terminals are obsolete electromechanical, and aging analog ICSS switches installed during the 1960s, 1970s, 1980s. More importantly, these switches should be replaced before they jeopardize the safe and efficient control of

commercial and general aviation aircraft. Many of the systems currently installed are unsupportable and replacement switches are mandatory to ensure the continuation of effective air traffic control services. The ETVS program is a joint FAA/DOD procurement with the majority of the DOD requirements being fulfilled in the out-years of the contract. RDVS IIA program provides for 50 to a maximum of 75 voice switches for use in medium and large terminal facilities.

## 1.3 Authorization for Removal

Removal of voice switching equipment described herein will start only after a site receiving the ETVS or RDVS IIA has achieved Operational Readiness Date (ORD) and after Air Traffic Managers has released the equipment. Authorization to begin removing voice switch equipment is expected not later than 60 days after each ORD. Removal of equipment should be coordinated with the appropriate local/regional property disposal specialist prior to initiating the process described herein.,

Removal of supporting resources at the Mike Monroney Aeronautical Center and the William J. Hughes Technical Center (WJHTC) will begin after all equipment has been decommissioned.

## 1.4 Referenced Documents

Documents referenced by this plan are listed below:

A. FAA Order 4800.2C Utilization and Disposal of Excess and Surplus Personal Property

B. FAA Order 1200.8C Public Information Activities and Programs

C. Interagency Support Agreement (ISA) SC4403-96122-001

D. FAA Disposal Guide Publication #329935 NSN 0056-00-480-0441

E. Integrated Communications Switching System (ICSS) Type I Technical Instruction Book Volumes I and II NSN 0056-00-480-0058 and 0056-00-480-0059

F. Integrated Communications Switching System (ICSS) Type II Technical Instruction Book Volumes I and II NSN 0056-00-480-0097 and 0056-00-480-0098

G. Integrated Communications Switching System (ICSS) Type IA Technical Instruction Book NSN 0056-00-480-0174

## 2.0 Affected Property

## 2.1 System Descriptions

### 2.1.1 Functional Descriptions

Voice switches provide air traffic controllers access to air-to-ground (A/G) and ground-to-ground (G/G) communications systems at control positions in Airport Traffic Control Towers (ATCT) and Terminal Radar Approach Control (TRACON) facilities. Voice switching systems are fielded as a single system per site. However, because the requirements for this capability differ between sites and because the existing equipment was procured under several contracts from different manufacturers; the configuration of each system will vary. This plan addresses the removal and disposition of a number of makes and models of voice switching equipment used in the terminal air traffic environment. Generally, this equipment can be grouped by manufacturer.

#### 2.1.1.1 AT&T/Western Electric Co (WECO)

All AT&T and WECO manufactured switches will be removed and reclaimed by AT&T under the direction of AOP-500. These switches include:

AT&T 400
WECO 300/301A
AT&T MTCS

The AT&T/WECO switches were fielded to support air traffic communications requirements at Airport Traffic Control Towers (ATCT) and Terminal Radar Approach Control (TRACON) facilities. These switches provide voice connectivity for air/ground communications. The AT&T/WECO switches also provide voice connectivity between air traffic controller positions and other ground facilities. Such connectivity may be provided either within the same facility or between facilities.

Questions concerning the removal of these switches should be addressed to Ms. Rosalind Ward (UNITECH) at (202) 484-2534 or Mr. Michael Sullivan, AOP-500 at (202) 484-1300.

#### 2.1.1.2 DENRO, Inc.

a. **Denro Model 400 Integrated Communications Switching System (ICSS) Type I**

The Model 400 Type I ICSS was fielded to support air traffic communications requirements at Airport Traffic Control Towers (ATCT) and TRACONs. The ICSS provides voice connectivity for air/ground communications. The ICSS also provides voice connectivity between air traffic controller positions and other ground facilities. Such connectivity may be provided either within the same facility or between facilities. An ICSS provides interphone connectivity to a Private Automatic Branch Exchange (PBX) and transmission equipment.

b. **ICSS Model 400 Type III (Southern California TRACON)**
The Model 400 Type III ICSS is a variant of the Model 400 Type I normally assigned to flight service stations. The only system of this type which is to be replaced under this plan is the system at Southern California TRACON (SCT). It performs similar functions to the Denro Model 400 system described above.

c. **OJ-314/FSA-58**
This model was fielded to DOD sites only. Removal and disposition of these switches is the responsibility of DOD. No FAA sites are affected.

#### 2.1.1.3 Litton AMECOM

a. **ICSS Model 3080 Type II**
This model was fielded to support air traffic communications requirements at large TRACONs. It performs similar functions to the Denro Model 400 and Type I systems described above. This model is model is modular and capable of supporting a minimum of 20 ATC positions and is capable of interfacing with at least 75 interfacility trunks, 30 DDD/FTS/Autovon trunks, 75 IN-WATS trunks and 75 radio channels. Site configurations are scaled by site needs and vary in the number of positions.

#### 2.1.1.4 Other Voice Switches
Other voice switches which will be replaced by the ETVS and RDVS IIA programs include, but are not limited to, the Intellect and the CT 2000. These switches were not procured through a national program and are the responsibility of the individuals sites and the regions to affect disposal. There are no national requirements for recovery or reassignment of this equipment.

#### 2.1.1.5 Radio Control Equipment and Four Channel Radio Control
This plan does not provide for removal and disposition of FA-9334, FA-8165 radio control equipment or the four channel radio control. In the absence of a specific disposal plan, this equipment should be excessed locally in accordance with FAA Order 4800.2C.

### 2.2 Descriptions of Excess Property
Property descriptions may be found in the ICSS Technical Instruction Books (TIB) listed above to assist FAA activities, contractors, and Defense Reutilization Marketing Offices (DRMOs) in planning to receive the property.

### 2.3 Other Excess Property
Locally procured switching equipment not specifically addressed under this plan shall be disposed of in accordance with FAA Order 4800.2C and FPMR. Local disposal through DRMOs is encouraged.

## 2.4 Planned Reclamation

### 2.4.1 AT&T/WECO Voice Switches

All AT&T and WECO manufactured switches will be removed and disposed of by Lucent Technologies at the direction of AOP-500 under the Vintage Switch Program.

### 2.4.2 Litton and Denro Voice Switches (ICSS)

In order to minimize the number of shipments of reclaimed equipment and administrative actions at field sites; any equipment to be reclaimed under a national program will be removed from systems that have already been shipped to the Lucent facility in Phoenix, AZ for disassembly. The FAALC, Communications / Metrology / Power Systems Support Branch, AML-640, will be responsible for coordinating reclamation these items, if any. Unless otherwise directed, no equipment will be shipped directly from sites to the FAALC.

#### 2.4.2.1 Defense Reutilization Marketing Offices (DRMOs)

In the absence of the AOP-500 contract with Lucent Technologies, and at the option of the individual regions and sites, the Department of Defense's Defense Reutilization Marketing Offices (DRMOs) may be used as a means of disposing of excess ICSS equipment. Information about the DRMOs, including site lists, points of contact, help line, technical support, customer service numbers, and policy assistance for recovery/reutilization issues and hazardous waste disposal may be found on the DRMS web site at www.drms.dla.mil .

##### 2.4.2.1.1 Interagency Agreement

Use of DRMO facilities is supported by Interagency Support Agreement (ISA) SC4403-96122-001. The ISA provides for the transfer of Department of Transportation (DOT) excess/surplus property to DRMOs for the purpose of precious metals recovery. Under this ISA, DOD will bear the cost of transportation from FAA facilities to the DRMO. DRMO transportation personnel have a list of approved carriers for DOD.

## 2.5 Local Requirements

### 2.5.1 Cannibalization of Obsolete Systems

The costs of cannibalization of obsolete systems for regional and/or site use will be borne by the respective regions.

### 2.5.2 Other Needs

The costs of cannibalization of obsolete systems for purposes other than augmentation of site spares will be borne by the Regions. It should be noted that supply and repair support will be discontinued for those sites included in the ETVS/RDVS IIA master schedule as the old systems are removed. Support beyond these times will be the responsibility of the Regions. The Logistics and Inventory System (LIS) Utilization, Screening and Disposal (USD) subsystem may provide a source of remaining equipment.

## 2.6 Logistics Support

### 2.6.1 Denro Voice Switches

Type I ICSS manufactured by Denro are currently supported through a national maintenance contract funded by AOS-100. Removal of these switches should be reported to AOS-100 to the attention of Mr. Boyd LeFever at (202) 267-7405. Timely notification of removal of these switches will help to conserve scarce operations funds.

#### 2.6.1.1 Denro Voice Switch Site Spares

Site spares supporting Denro Type I equipment are owned by Denro and are not to be disposed of with the end item. Equipment not returned to Denro may result in charges to the Government.

### 2.6.2 Litton Voice Switches

Type II ICSS manufactured by Litton AMECOM are currently supported through a national maintenance contract funded by AOS-100. Removal of these switches should be reported to AOS-100 to the attention of Mr. Boyd LeFever at (202) 267-7405. Timely notification of removal of these switches will help to conserve scarce operations funds.

#### 2.6.2.1 Litton Voice Switch Site Spares

Site spares supporting Litton Type II equipment are the property of Litton AMECOM and are not to be disposed of with the end item. Equipment not returned to Litton may result in charges to the Government.

## 3.0 Property Removal

Removal of equipment will commence upon receiving authorization from the Air Traffic Managers at each site and after coordination with the Property Disposal Specialist. The Regional Associate Program Manager (RAPM) will coordinate with appropriate site and regional personnel to execute activities associated with the removal of excess equipment. Equipment, including associated cables, will be removed by site and regional personnel. Removals should coincide with the installation of the ETVS or RDVS IIA in accordance with paragraph 1.3, Authorization for Removal.

## 3.1 Disposal Issues

Appendix (1) lists the disposal issues that are being addressed for voice switch disposal. This appendix provides issue definition, resolution and status. Where appropriate, the resolution column references disposal plan paragraphs where additional information or issue resolution is located. The table will be updated as new issues are identified and issue resolution is reached. Updates may be provided to Mr. Bill Howard, ARN-200, at (202) 493-0707, FAX (202) 366-1806 or by CC Mail.

## 4.0 roperty Disposition

### 4.1 Special Disposal Authority

None of the voice switches which are addressed in this plan are the subject of special disposal authority.

### 4.2 Responsibilities

Table (1) identifies personnel and organizations that will be responsible for executing elements of this plan.

### 4.2.1 Lucent Technologies

#### 4.2.1.1 Use of Lucent Contract

Use of the Lucent Technologies contract will be a local/regional decision subject to availability of the contract and funding resources. AOP-500 will administrate the Lucent contract and direct contractor efforts.

#### 4.2.1.2 Scope of Contractor Effort

Under the terms of the AOP-500 contract with Lucent Technologies, the contractor will remove excess equipment from each site as directed by AOP-500. Following receipt of a "removal" TSR from AOP-500, contractor personnel may make a site visit to survey the effort required. The contractor will subsequently remove the equipment, with the exception of contractor-owned site spares, from the site and ship it to their Phoenix facility. The scope of the contractor's work is to receive, package as required, remove the equipment and transport it from each site for final disposition. Lucent personnel shall not be utilized to disconnect equipment from the NAS including removing cables from facilities.

#### 4.2.1.3 Reporting

The contractor will forward an inventory of the items as surplus parts and equipment to accumulate to AOP-500 support contractors on a quarterly basis. The AOP-500 support contractors will then prepare the FAA Western Pacific Region Report of Excess Personal Property Automated Worksheet. The worksheet will be approved by the AOP-500 project manager and forwarded to the Western Pacific Region Property Disposal Officer for processing. The property disposal officer will then forward disposal authorization to OTS personnel who will coordinate further processing at the Phoenix facility.

### 4.2.2 Local Airway Facilities (AF)

#### 4.2.2.1 Equipment Disconnection

Local AF personnel shall be responsible for disconnection of equipment cited in this plan from the NAS and to prepare it for removal by the contractor or Government counterpart in the absence of the Lucent contract.

#### 4.2.2.2 Litton Type II Site Spares

Local AF shall assemble site spares and arrange shipment to:

Litton Systems Inc.
AMECOM Division
5115 Calvert Road.
College Park, MD 20740-3898
Attention: Mr. Al Byrum

#### 4.2.2.3 Denro Type I Site Spares

Local AF shall assemble site spares and arrange shipment to:

Denro
Attn. Depot Recieving
9318 Gaither Road
Gaithersburg, MD 20877

### 4.2.3 Property Custodians

#### 4.2.3.1 Initiate Disposal

Regional AXX-470 personnel should prepare a Telecommunications Service Request (TSR) indicating discontinuation of service and forward it to AOP-500 to the attention of Ms. Rosalind Ward. Ms. Ward can be reached at (202) 314-4344, fax (202) 484-8032. Thirty days advance notice of removals is requested to complete the coordination process. Ensure that the TSR includes both primary and secondary points of contact. Coordination with AOP-500 should also include advising AOP-500 how the Region plans to document the excess equipment (locally or under vintage switch disposal procedures via AWP-54).

In the absence of the Lucent contract, equipment shall be disposed of in accordance with this plan and the latest version of FAA Order 4800.2.

##### 4.2.3.1.1 Sale of Equipment and Logistics Support

Offers to sell equipment shall indicate that the FAA considers the equipment to be obsolete and no longer provides logistical or technical support for it.

##### 4.2.3.1.2 Reclaimed Items

Reclaimed items will be removed from equipment which has been relocated to the Lucent Technologies facility in Phoenix, AZ for disassembly and final disposition.

### 4.2.4 Property Managers / Disposal Officers

#### 4.2.4.1 Excess Reports

Excess reports for equipment removed by contractor personnel and shipped to Phoenix, AZ will be prepared locally. Under procedures established for disposal of vintage switch equipment excess reports

may be prepared by AWP-54. If the latter approach is desired then initial coordination with AOP-500 should include this subject.

In the absence of the Lucent contract, regional property managers will provide excess reports in accordance with regional procedures and the most current version of FAA Order 4800.2.

#### 4.2.4.2 Property Record Adjustment

An adjustment to the in-use personal property records and the Facilities Systems Equipment Profile (FSEP) shall be made in accordance with regional procedures and the most current version of FAA Order 4800.2.

#### 4.2.4.3 Shipments

Excess equipment will be shipped to Phoenix, AZ by Lucent under the AOP-500 contract using AOP-500 funds. Unless otherwise directed, no equipment will be shipped to the FAALC. Site spares belonging to Litton AMECOM must be shipped in per instructions in section 4.2.2.2 above.

Table (1) Disposal Personnel

| Name | Area of Responsibility | Telephone |
|---|---|---|
| Steve Dash (AND-320) | Product Lead, VS&R PT | 202-493-4782 |
| Bill Howard (ARN-200) | APMR, VS Disposal Plan Development | 202-493-0707 |
| John Babich (ARN-200) | APMR, A/G Communications (RCE) | 202-493-0709 |
| George Clark (ARN-200) | Logistics Manager | 202-493-4789 |
| Marion Carlson (AFZ-500) | Property Management & Disposal | 202-267-9686 |
| Linda Wagner (AFZ-500) | Property Management | 202-267-8860 |
| | | |
| Robert Rams (ANS-500) | Environment & Safety | 202-267-7325 |
| Ed Hand (AND-320) | Voice Switch Deployment | 202-493-4792 |
| Mike Sullivan (AOP-500) | Vintage Switches (WECO, MTCS) | 202-314-7749 |
| Rosalind Ward (Unitech AOP-500) | Switch Removal Coordination | 202-314-4344 |
| | **RAPMS** | |
| Melissa Nelson (ANI-610) | Southwest Region RAPM | 817-222-4680 |
| Steven LoVerde (ANI-220SL) | Eastern Region RAPM | 718-553-3469 |
| Joe Szanati (AGL-459) | Great Lakes Region RAPM | 847-294-7591 |
| David Anderson (ASO ANI-310C) | Southern Region RAPM | 404-305-6294 |
| Gary Pettengill (AWP-400) | Western Pacific Region RAPM | 310-725-3495 |
| Mel Leskinen (ANI-700) | Alaskan Region RAPM | 907-271-5199 |
| Mark Stack (ANM-450E2) | Northwest Mountain Region RAPM | 206-227-2471 |
| Ed Davis (ANE-422) | New England Region RAPM | 617-238-7435 |
| Doug Edwards (ANI-500) | Central Region RAPM | 816-426-2242 |
| | **FAA Logistics Center** | |
| Ron Kuhlman (AML-641) | Logistics Center Equip. Specialist | 405-954-5563 |
| Chris Babcock (AML-461) | Logistics Center Engineering | 405-954-5227 |
| Pat Secrest (AML-300) | Logistics Center PHS&T | 405-954-5359 |
| Regina West (AML-600) | Logistics Center Supply Mgmt. Division | 405 954-5627 |
| | **Property / Disposal Managers** | |
| Rich Piech (ACT-410) | WJHTC Disposal | 609-485-6732 |
| David Paveglio (AEA-55) | Property Manager | 718-553-3052 |
| Joy Schilling (ASW-54C) | Property Manager | 817-222-4381 |
| Adamy Martinez (AGL-74B) | Property Manager | 847-294-7226 |
| (ANE- ) | Property Manager | |
| (ANM- ) | Property Manager | |
| Rex Young (AAL-54B ) | Property Manager | 907-271-3571 |
| Offie Baugh (AWP-54) | Property Manager | 310-725-7510 |
| Marshall Fue | Property Disposal Specialist | 816-426-3396 |

| Name | Area of Responsibility | Telephone |
|---|---|---|
| (ACE-52D) | | |
| David Houston (ASO-52A) | Property Manager | 404-305-5731 |
| Flossie Thomas (ACT-131A) | Property Manager | 609-485-4158 |
| Lynda Reiter (AMQ-1) | Property Manager | 405-954-5102 |
| Patty D. O'Sullivan (AEA-55C)<br>Diana Rizzuto | Property Disposal | 718-553-4987<br>718 553-4983 |
| Carol Harakal(ASW-54)<br>Janis Fifita (ASW-54A3) | Property Disposal Specialist | 817-222-4381<br>310-725-7519 |
| Adamy I. Martinez (AGL-74B) | Property Disposal | 847-294-7226 |
| Louis J. Landi (ACT-131A) | Property Disposal | 609-485-5585 |
| Toni D. Ferencich (AML-380) | Property Disposal | 405-954-5137 |

**Table (1) Disposal Personnel Contd.**

| | RPMES | |
|---|---|---|
| Tom Allan (ASW-472) | Regional Program Manager for Environment & Safety | 817-222-4729 |
| Tony Becker (AEA-462) | Regional Program Manager for Environment & Safety | 718-712-6343 |
| Jim Harmon (AGL-473) | Regional Program Manager for Environment & Safety | 847-294-8473 |
| Marla Noak (AMP-100) | Regional Program Manager for Environment & Safety | 405-954-5436 |
| Howard Kimpton (ACT-434) | Regional Program Manager for Environment & Safety | 609-485-5998 |
| Alan Stensland (ASO-471) | Regional Program Manager for Environment & Safety | 404- 305-6570 |
| (AWP-474.3) | Regional Program Manager for Environment & Safety | 310-725-7469 |
| Cathy Benediktsson (AAL-471) | Regional Program Manager for Environment & Safety | 907-271-5373 |
| Jim Kitson (ACE-473) | Technical Support Supervisor for Environment & Safety | 816-426-3820 |
| Dave Powers (ANM) | Regional Program Manager for Environment & Safety | 425-227-1552 |
| Daniel Kiley (ANE) | Regional Program Manager for Environment & Safety | 781-238-7816 |

## 4.2.5 FAA Logistics Center

### 4.2.5.1 Reclaimed Items

AML-400 will determine the range and depth of any items that may be reclaimed. Reclamation from equipment stored at the Lucent Phoenix, AZ facility will be coordinated through AOP-500.

### 4.2.5.2 Shipment of Reclaimed Items

AML-340 will provide instructions regarding the proper transportation, packaging and sources for packaging materials for equipment that is to be recovered, if any, by the FAALC. The FAALC will be responsible for transportation costs associated with shipping equipment from the Lucent facility to the FAALC.

## 4.2.6 Communications and Navigation Division, ARN-200

### 4.2.6.1 Implementation and Monitoring

ARN-200 will coordinate with the VSRPT, AND-320, in reviewing and recommending concurrence/non-concurrence with requests for deviation from this plan. All ICSS users and the FAALC will be advised by ARN-200 of any approved program changes or operational requirements which will impact future support requirements ( e.g. continued operation or reuse of facilities, transfers to military or foreign users, hazmat disposal, etc).

#### 4.2.6.2 Changes to Maintenance Data Recording Systems

ARN-200 will coordinate changes to maintenance data recording systems to reflect disposal.

#### 4.2.6.3 Historical Preservation and Special Projects

ARN-200 will coordinate historical preservation of equipment, as required.

#### 4.2.6.4 Cessation of Logistics Support

ARN-200 will coordinate with AML-640 and AOS-100 to phase out and discontinue logistics support, including supply and depot repair, for the Litton and Denro ICSS equipment.

#### 4.2.6.5 Removal from Baseline

Representing the Voice Switching and Recording Product Team; ARN-200 will initiate a NAS Change Proposal (NCP) to eliminate the obsolete equipment from the NAS baseline.

## 5.0 Hazardous Materials Disposal

Under the provisions of this plan no hazardous material will require processing by FAA field facilities. Equipment which is to be disposed of under this plan, will be shipped as whole systems to the Lucent facility in Phoenix, AZ and, as such, will not constitute hazardous materials. Lucent will provide certificates of destruction for hazardous materials, if any, removed from equipment dismantled at their Phoenix facility. Batteries, which may constitute hazardous materials, will also be transported by Lucent to an appropriate site for disposal. Batteries will be shipped in accordance with DOT regulations contained in 49 CFR.

## 5.1 Monitoring

ARN-200 will coordinate with AOP-500 and ANS-500 to monitor early removals of ICSS equipment under this plan to determine if any hazardous materials are identified during disassembly. If such materials are identified, this plan will be revised to include specific instructions for field facilities for disposal of hazardous materials in the absence of the Lucent contract.

## 6.0 Funding

## 6.1 Vintage Switches

Funding for removal of the existing voice switches will depend upon the switch configuration at each site. Vintage switches including the AT&T / WECO switches will be funded by AOP-500 under the vintage switch contract. Under this contract Lucent Technologies will remove the old equipment (after disconnection by FAA personnel, and transport it to a central location for disposal.

## 6.2 ICSS and Other Switches

The AOP-500 contract with Lucent is also available for removal of other voice switches but is subject to funding availability over the life of the ETVS / RDVS IIA installation program. As of this date, funding is available from AOP-500 through FY-99 and will be sought for out-years.

### 6.3 Disposal Without Lucent Contract

In the absence of the Lucent or successor contracts, removal and disposal must be accounted for in regional work plans and funding provided for removal of the equipment. If DRMOs are to be used then the regional personnel may arrange for transportation of the equipment with the appropriate DRMO point of contact using DOD funded transportation.

#### 6.3.1 Initiation of Property Turn-in

In order to initiate the property turn-in procedures, an up-front Miscellaneous Obligation Document (MOD) is needed. This may be accomplished by a memorandum from the Regional division wishing to utilize the service to their servicing accounting office notifying them of the division's projected usage. The MOD must contain a dollar amount and appropriate funding source.

### 7.0 Schedule

The schedule for voice switch replacement is subject to change and is maintained by the VSRPT, AND-320. Removal of obsolete equipment is expected to follow ORD at each site not later than 60 days. An updated copy may be obtained by contacting Mr. Ed Hand, AND-320, at (202) 493-4792.

It is estimated that waste material removal should take less than 5 business days.

### 8.0 Historical Preservation

In keeping with the FAA's policy regarding the preservation of Air Traffic Control artifacts, the Smithsonian Institution will be given an opportunity to obtain excess personal property. This policy is outlined in FAA Order 1200.8C. Table 12 identifies points of contact for the preservation.

Table (2)
Historical Preservation Organizations

| Organization | Point of Contact | Phone Number |
|---|---|---|
| Smithsonian Air & Space Museum | Paul Ceruzzi | 202-357-2828 |
| FAA Public Affairs | Ned Preston | 202-267-3478 |
| FAA Public Affairs (Oklahoma City) | Bob Hoppers | 405-954-5332 |
| Air Traffic Control Association | Andrew Pitas | 703-522-5717 (Office)<br>703-777-4838 (Home) |
| Cradle of Aviation Museum | Josh Stoff | 516-572-0411 |

### 9.0 Precious Metals Recovery Issues

Recovery of precious metals will not be a consideration when the Lucent contract is used for disposal.

## 9.1 Recovery Without Lucent Contract

In the absence of the Lucent contract, site and regional personnel are encouraged to affect recovery under the existing Memorandum of Agreement between DOD and DOT referenced in Section 1.5 above. The DRMS web site referenced in section 2.4 above will provide additional and updated information.

## 10.0 Real Property Issues

None.

## 11.0 Environmental Issues

None other than those identified in Section 5.

## 12.0 Legal Issues

None.

## 13.0 Safety Issues

The lead acid batteries used in the ICSS system contain sulfuric acid and lead. The batteries must be handled to avoid contact with contents.

## 14.0 Labor Relations Issues

There are no labor relations issues related to the disposal of existing voice switches. Both the ETVS and RDVS IIA programs have been briefed to the FAA's labor unions at the national level in accordance with their respective collective bargaining agreements. Included in these briefs was a description of the equipment that was to be removed.

## 15.0 PHS&T Issues

None.

## 16.0 Political/International Issues

None.

Appendix (1) Disposal Issues

| Item No | Definition | Resolution | Status |
|---|---|---|---|
| 1 | Does the leapfrog program apply and, if so, have all associated requirements been addressed? | Leapfrog generally does not apply to this program. Local exceptions are possible. | Closed |
| 2 | Have cannibalization issues been addressed? | Yes. See section 2.5.1. | Closed |
| 3 | Is continuing support required for other agencies or contractor maintenance? | No. | Closed |
| 4 | Have site spares been properly addressed? | Site dependent. See section 2.5.1. | |
| 5 | Have requirements, that are needed prior to disposal activities beginning, been identified? | Yes. This plan provides necessary info. | Closed |
| 6 | Has the method of disposal been identified? | Site / regional option | |
| 7 | Have requirements for a Technical Support Service Contractor or other contractors been identified? | Regions may elect to use TSSC contractors for equipment removal. | Closed |
| 8 | Is the equipment covered under FAA Special Disposal Authority? | Special disposal authority does not apply. | Closed |
| 9 | Are any hazardous materials known or suspected in the property being disposed of? | None known or suspected but disposal will be monitored. | |
| 10 | Are there any special contractual issues? | None. | |
| 11 | Are any precious metals known or suspected and has their value been estimated? | An undetermined amount of precious metals may be present in ICSS CCAs. Reclamation activities (e.g. DRMO) can provide specific estimates. | Closed |
| 12 | Are there any environmental issues? | None. | Closed |
| 13 | Are there any real property (both land and structures) issues? | None. | Closed |
| 14 | Will equipment removal require an environmental impact statement or environmental assessment? | No. | Closed |
| 15 | Will equipment removal require building refurbishment, demolition, or restoration? | Site dependent. Potential requirements to refurbish floors and remove cabling | |
| 16 | Will disposition surface concern from neighboring populous? | No. Equipment is internal to ATC facilities. | Closed |
| 17 | Are there any legal issues? | None. | Closed |
| 18 | Are there any safety issues? | None. | Closed |

| Item No. | Definition | Resolution | Status |
|---|---|---|---|
| 19 | Are there any union issues? | None. | Closed |
| 20 | Are there any transportation, storage, or handling issues? | None. | Closed |
| 21 | Are there any political/international issues? | None. | Closed |
| 22 | Are there any historical considerations? | None. | Closed |
| 23 | Who is responsible for paying for costs related to removal of hazardous materials? | AOP-500 contract for equipment. Regions are responsible in the absence of the contract. However, no significant level of hazardous materials has been identified. | |
| 24 | Who is responsible for paying for costs related to removal of precious metals? | Reclamation activities receiving excess equipment. | Closed |
| 25 | Who is responsible for packaging, handling, storage, and transportation? | Regions or reclamation activities depending on method of disposal. | |
| 26 | Who is responsible for funding site restoration? | Regions. | Closed |
| 27 | Who is responsible for funding building renovation? | Regions. | Closed |
| 28 | Who is responsible for funding resolution of legal problems? | None have been identified. | Closed |
| 29 | Have trucks been ordered to transport excess property to DRMO? | Dependent on election to use DRMO | Closed |
| 30 | Has the associated DRMO been given a 2 week notice that the FAA intends to transport associated property? | Dependent on election to use DRMO | Closed |
| 31 | Has the FAALC been notified that equipment is being transported to the depot for spares support? | Dependent on FAALC requirements and prior approval of shipment by FAALC. | Closed |
| 32 | Secure power. | Local F&E | Closed |
| 33 | Remove & dispose of hazardous waste. | None identified | Closed |
| 34 | Identify and tag cables that will be disposed of. | Local F&E | Closed |
| 35 | Cut cables leaving connectors attached. | Local F&E | Closed |
| 36 | Unbolt cabinets. | Local F&E | Closed |
| 37 | Remove cabinets. | Lucent or local F&E | Closed |
| 38 | Remove cables. | Lucent or local F&E | Closed |
| 39 | Repair floors. | Local F&E | Closed |

## APPENDIX I. FIELD FAILURE AND TROUBLE REPORT FORM AND PROCEDURE

**SAMPLE FORM**

REF. # WHEN PLACING ORDER

**LITTON AMECOM**
15883 GAITHER DR.
GAITHERSBURG, MD 20877
PHONE: 1-800-847-7790
PHONE: 301-869-1628

**No. LE** 42417

## FIELD FAILURE AND TROUBLE REPORT

**SITE:** _____ **PROJECT NUMBER: 50**

**INITIATOR'S NAME:** _____ **DATE:** _____

**PART NOMENCLATURE:** _____

**P/N:** _____ **S/N:** _____

**DESCRIPTION OF PROBLEM:** _____

_____

_____

**COPY 1 - DEPOT**

**FTR PROCEDURE**

(FIELD FAILURE AND TROUBLE REPORT)

THE FTR IS A 3 PART FORM. FOR EACH FAILURE, PLEASE FILL FORM OUT AS FOLLOWS:

| | |
|---|---|
| **SITE:** | **NAME OF SITE WHERE FAILURE OCCURRED** |
| **INIATIATOR'S NAME:** | **NAME OF PERSON FILLING OUT FTR** |
| **DATE:** | **DATE FAILURE OCCURRED** |
| **PART NOMENCLATURE:** | **NAME OF PART FIALURE** |
| **P/N:** | **PART NUMBER OF FAILURE** |
| **S/N:** | **SERIAL NUMBER OF FAILURE** |
| **DESCRIPTION OF PROBLEM:** | **BREIF DESCRIPTION OF FAILURE** |

AFTER THIS IS COMPLETED, RETAIN 2nd (YELLOW) COPY
RETURN TO AMECOM WITH FAILED PART THE 1ST (WHITE) AND LAST (HARD COPY).

THANK YOU FOR YOUR COOPERATION

LOGISTIC PLANNER